6.

THE Second Booke of the Englisſh Huſbandman.

CONTAYNING

the Ordering of the Kitchin-Garden, and the Planting of ſtrange Flowers: the breeding of all manner of CATTELL. Together with the Cures, the feeding of *Cattell, the Ordering both of Paſtures and* Meddow-ground: with the vſe both of high-wood and vnder-wood.

WHEREVNTO IS ADDED

a TREATISE, called *Goodmens Recreation:* Contayning a Diſcourſe of the generall Art of Fiſhing, with the Angle, and otherwiſe; and of all the hidden ſecrets belonging thereunto.

TOGETHER

VVith the Choyce, Ordering, Breeding, and Dyeting of the fighting Cocke.

A worke neuer written before by any Author.

By *G. M.*

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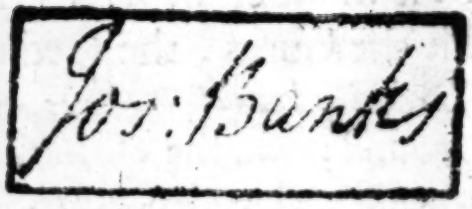
Jos: Banks

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CHAP. I.

How the Husbandman ſhall iudge and fore-know all kinde of Weathers, and other ſeaſons of the yeere.

ALthough GOD out of his infinite prouidence, is the onely directer and ruler of all things, gouerning the yéeres, dayes, minutes and ſeaſons of the yeere according to the power of his Will: yet for as much as hee hath giuen vs his Creatures, and placed the Celeſtiall bodies to holde their influences in vs, and all things elſe which haue increaſement, reuealing vnto vs from their motions, the alteration and qualities of euery ſeaſon, it ſhall be very behouefull for euery Huſbandman to know the ſignes and tokens of euery particular ſeaſon, as when it is likely to

Raine, when Snow, when Thunder, when the Winds will rise, when the Winter will rage, & when the Frosts will haue the longest continuance, that fashioning his labours, according to the temperature or distemperature of the weather, hee may with good iudgement and aduise, eschew many euils which succéede rash and vnfore-loking actions.

Of Rayne.

To speake then first of the generall signes of Raine, you shall vnderstand that the olde Husbandmen did obserue rules generall, and rules speciall: the generall rules were such as concerned eyther all, most, or a great part of the whole yéere: the rules speciall, those which concerned dayes, houres, and times present: of which I will first speake in this place.

Signes from Clouds.

If therefore you shall at any time perceiue a Cloud rising from the lowest part of the Horizon, and that the maine body be blacke and thicke, and his beames (as it were) Curtaine-wise, extending vpward, and driuen before the windes: it is a certaine and infallible signe of a present showre of Raine, yet but momentary and soone spent, or passed ouer: but if the Cloud shall arise against the Winde, and as it were spread it selfe against the violence of the same, then shall the Raine be of much longer continuance.

Signes from the Moone.

If when you sée the new Moone appeare, you perceiue that some part of her Hornes are obscured, or if it be black, or discoulored in the middest: if it hang much to the West, if it be compast or girdled about, eyther with thicke, or waterish transparent vapours: if it loke more then ordinarily pale, or if it shall beginne to raine small and mist-like on the fourth or fift day of her age, all these are infallible signes of Raine, and the last an assured signe that the Raine will continue all that quarter of the Moone following.

Signes from the Sunne.

If you shall sée the Sunne rise earely in the Morning, and spread forth his Beames violently, yet with a very moyst and waterish complexion, and therewithall in the West

Weeſt you doe ſée a bedde of thicke vapours to ariſe, increaſe and aſcend vpward, then ſhall you bee aſſured that at high noone, when thoſe vapours and the Sunne ſhall méet, there will be raine, and that raine of no ſhort continuance: If you ſhall ſée the Sunne riſe red, and turne ſodainely blacke, if it haue many red clouds about it mixt with blackeneſſe, if it haue a ſpacious Circle about it, or if when it ſetteth you ſée it fall behinde a banke of darke and blacke Cloudes, they be all moſt certaine and infallible ſignes of raine, which will preſently follow.

If it lighten at noone, or any time whileſt the Sunne ſhineth, eyther with Thunder or without thunder, or if it lighten in fayre weather, or if it lighten more then it thundereth, all are moſt certaine ſignes of raine which will follow. Signes from the Lightning.

If you ſhall perceiue water-Fowle to bathe much: if the Crow wet her head at the water brimme, or if ſhée wade into the water, or if ſhe ſhall cry and call much: if the Rauen ſhall croake with a hollow or ſounding voyce: if the houſe-Cocke ſhall crow at all houres: if Pigions ſhall come home late to the Doue-houſe: if Sparrowes ſhall chyrpe and cry earely in the morning: if Bées flye not farre from their Hyues: if Flies and ſmall Gnats bite ſharpe and ſore, all are moſt certaine ſignes of raine, which will preſently follow. Signes from Fowle.

If you ſhall perceiue your Oxen to eate more grédily, and with a more earneſt ſtomacke then their vſuall cuſtome: if your Kine gaze and looke much vpward: if Swine ſhall play and gambole vp and downe: if Horſes being at graſſe ſhall ſcope, courſe, and chaſe one another: or if the Cat ſhall waſh behinde her eare, all are certaine ſignes of raine to follow. Signes from Beaſts.

If Salt turne moyſt ſtanding in dry places, if Channels, Vaults, and common Sewers ſtincke more then vſuall: if Bels ſeeme to ſound louder then they were wont: if the Tazell at any time cloſe vp his pricks: if Signes from things without motion.

Soote fall much from the Chimney: If oyle ſhall ſparkle much when it burneth, or if Marble, Pauing-ſtone, or other wals ſhall ſweat, or be much moyſt, all are moſt inuitable ſigne of rayne which will follow.

Signes of much Raine.

If Raine, when it falleth, make great bubbles, or ſuch a noyſe as is not ordinary: or if raine fall mildely, ſmall, and miſt-like: or if rayne fall in a calme when no winde ſtirreth: or if when it rayneth you cannot perceiue the Racke or Clouds to moue: if Pullen flye to their rouſt aſſoone as the raine begins: if the Raine-bow ſtretch towards the South, or if it doe reflect and ſhée dwle: if you ſhall ſée one or more Weather-gals which are like Raine-bowes, onely they ariſe from the Horiſon but a ſmall way vpward, all theſe are moſt certaine ſignes of much raine that will follow.

Signes of Snow or Haile.

If blacke Clouds ſhall turne ſodainely white: if about eyther the Sunne or Mone be pale, and waterish Circles, or that they ſéeme to ſhine as through a miſte: if the Ayre be thicke and extreame cold without froſts: if with the ſignes of raine be mixt ſignes of cold alſo, or if windes be nipping and extreame ſharpe, all are moſt certaine tokens that Snow or Hayle will follow preſently after.

Signes of winde.

If when the Sunne ſetteth it loketh red and fiery, and that all that part of the Horizon loke red alſo, or if it looke bleiwſh, or ſéeme greater then his ordinary proportion: If the Mone doe bluſh or loke high colloured, if the Racke ride high, and the Firmament be much vaulted: if Woods and Hils ſéeme to make a noyſe: if the Stars ſéems to ſhine brighter then vſuall: if it ſhall thunder in Winter, or if it thunder without lightning: if Bels be heard farre off with more eaſe then accuſtomed, and preſently in the ſame inſtant be not heard at all: If Cobwebs flye much in the ayre: If Hernes or Heronſhoes cry much in their flying: If fire ſparkle much, or if wood or Wainſcot cracke much, all theſe are moſt certaine ſignes of much winde that will follow after.

Signes of tempeſts.

If you ſhall perceiue the Morning or Euening Sunne, eyther

eyther in the Sommer or in the Autumne, to ſhine hotter or to ſcorch more then accuſtomed, when the ayre is preſt with an extreame blacke cloude, or with many clouds, if you perceiue whirlewindes to blow oft and violently: if you ſée the Raine-bow ſhall appeare in the Weſt without raine: if you ſée flames and meteors flaſhing in the ayre, or if the Porpus ſhall be ſéene in the freſh Riuer, all are moſt certaine ſignes of thunder, lightnings and tempeſts, which will follow.

If the Sun riſe gray and cléere in the morning, and likewiſe ſetteth without darkeneſſe, not loſing a minute in the declination: if the euening ſkye be ruddy and not fierie, more purple then ſkarlet: if the Moone be cléere when it is foure or fiue dayes olde: if it lighten after Sunne-ſet without thunder: if the dewe fall in great abundance and in the riſing aſcend vp to the mountaines: if the North winde blow ſtrong: if the Owle doe whup much and not ſcrytch: if flyes at night play much in the Suns beames: if Crowes flocke much together, and cakell and talke: if Bats flye buſily vp and downe after Sunne-ſet, if you ſée Cranes flye high, and water-Fowle make their haunts farre off from the water, all theſe are moſt certaine ſignes of very faire weather which will follow after. Signes of faire weather.

If water-Fowle forſake the Water: if the Nightingale ſing more then other Birds, if Cranes flocke together, if Géeſe fight for their feeding place, or if Sparrowes call very earely in the Morning, any of theſe are certaine ſignes that winter is néere at hand. Signes of Winter.

If the Weſt winde blowe freſhly Morning and Euening: if the colde abate and loſe much of his vigor, if Swallowes begin to come in and flye buſily about, if the breſt-bone of the Mallard or Woodcocke loke white and cléere, any of theſe are certaine ſignes that the Spring is at hand. Signes of the Spring.

If the Kammerioe in the Spring, and ſhew more then an vſuall luſt: if the Spring haue beene very extraordi- Signes of a hot Sommer.

narily colde, or if Mildewes fall not in the Woodland Countryes, any of these are certaine signes of a hot Summer to follow after.

Signes of a long Winter.

If you shall see the Oake loaden with Akornes: if the brest-bone of the Mallard when he is kild looke red: if Hornets be seene after the end of October, or if Cattell doe trample and tread the earth much, making it myrie, or like a new plowde field: any of these are most certaine signes that the Winter will be sharpe, long, and cruell.

Signes of a forward or backward yeer.

If there fall much Raine before October, by meanes whereof many inundations doe follow, and that such wet lye long aboue ground: it is a most infallible token that the yeere will be very forward: but if the wet doe fall after October then it is a signe that the yeere will be indifferent, but and if the wet fall after Nouember, then it is held for most certaine that the yeere will fall out very slacke and backeward.

Signes of a good or bad yeere.

If the Oke Apples, when they are opened, breed flyes, or if Haruest be seasonable, and the Spring warme: if Snow fall in Februarie: if Broome put forth great store of Flowers: if the Walnut-tree haue more blossoms then leaues: if the flower of the Sea-Onion wither not quickly, or if the Spring be preserued from frosts and blasting, then any of these are certaine signes that the yeere will proue passing good and fruitfull: but if the Oake Apple breede instead of a Flye a Spyder: if Comets or Meteors oppresse the Ayre: if the Sommer fall out vnnaturally moyst: if the dewes when they fall at the rising of the Sunne descend to the Riuers: if frosts come in vnseasonable times: if wood-Birds flye to the plaines, and refuse couert: if the Sunne haue his whole body, or at least three parts Eclipsed: when Corne beginneth to bloome, and is not fully Kirneld, then any of these be most certaine signes that the yeere will proue bad, barrayne, & fruitlesse.

Signes from Christmas day.

Againe, if Christmas day shall fall vpon the Sunday, the yeere shall be good, seasonable and abounding with all store and plenty: if it fall vpon Munday the yeere shall

be

be reaſonable temperate and fruitfull, onely ſomething ſubiect to inundation of waters, loſſe by ſhipwracke, and ſome mortality of people, eſpecially women in childbearing: if it fall vpon Tueſday, the yéere will proue very barraine and vnfruitfull, much dearth will raigne, and amongſt people great plague and mortallitie: if it fall vpon Wedneſday, the yéere ſhall be reaſonably ſeaſonable, though a little inconſtant: there ſhall be plenty of all things, onely much ſickeneſſe, and great likelyhood of warres: if it fall vpon the Thurſday, the yéere ſhall be generally very temperate and wholeſome, onely the Sommer ſubiect to moiſtneſſe, much deuiſion is like to fall amongſt the Clergie, and women ſhall be giuen to more laciuiouſneſſe then at other ſeaſons: if it fall on the Friday, the yéere ſhall be barraine and vnwholeſome, for ſickneſſe ſhall rage with great violence, much mortallitie ſhall fall amongſt yong Children, and both Corne and Cattell ſhall be ſcarce, and of a déere reckoning: if it fall on the Saturday, the yéere ſhall be reaſonably good and plentifull, onely the people of the world ſhall be exceéding peruerſe, & much giuen to mutinie & diſſention one againſt another.

Againe, if the Sunne riſe without impediment, and ſhine bright and cléere vpon Chriſtmas day, the yéere will be very plentifull: if it riſe likewiſe cléere the ſecond day in Chriſtmas, then Corne will fall in price: if it riſe cléere the third day in Chriſtmas, there will onely be diſſention in the Church: if on the fourth day, it foreſhewes trouble vnto yong perſons: if on the fift day, it ſhewes that many good things will increaſe: if on the ſixt, doubtleſſe euery Garden will bring forth great plenty: if on the ſeauenth, then is much dearth and ſcarcitie to be feared: if it ſhine cléere on the eyght day in Chriſtmas, then there is likely to be great ſtore of Fiſh: if on the ninth, it will doubtles proue a good yéere for all manner of Cattell: if on the tenth, the yéere is likely to yéeld much cauſe of mourning: if on the eleauenth, there will fall much fogges, thicke miſtes, and great infection will follow after.

Signes from the Sunne riſing.

Laſtly,

Lastly, if the Sunne shine cléere the twelfth day after Christmas, it fore-shewes much warre and troubles, with great losse and bloudshed.

Signes from the twelue dayes in Christmas.

Againe, according to these former obseruations, you shall vnderstand, that what weather shall fall or be on the fire and twentieth day of December, the like weather shall be all the moneth of January after, what shall be on the seauen and twentieth of December, the like shall be all the moneth of Febzuary following: what weather shall be on the eight and twentieth day of December, the like weather shall be all March following: what weather shall be the nine and twentieth day of December, the same shall be all Aprill after: what on the thirtieth, the same all May: what on the one and thirtieth the like all June following: what weather shall fall on the first of January, the same shall be all July after: what on the second of January, the same all August after: what on the third, the same all September after: what on the fourth, the same all October following: what on the fift, the same all Nouember after, and what weather shall fall on first of January, which is Twelft-day, the same weather shall fall all December following.

Signes from Saint *Pauls* day.

Againe, if Saint Pauls day proue fayre, dry and bright, it foreshewth plenty of all things the yéere following: but if it be misty then it shewes great dearth of Cattell. If there fall vpon that day Snow or Raine, then it shewes Famine and Want of Corne, but if it be windy, tempestuous, or if it thunder, then it sheweth that great warres will follow.

Signes from *Maudlin*, and Saint *Swythens* day.

Againe, loke what quantitie of raine falleth eyther on Mary Maudlins day, or on Saint Swithens day, be it more or lesse, the same proportion will fall for the space of forty dayes after: but if these two dayes be fayre and dry all the time of Haruest will be so also.

If Corne shall be cheape or deare.

Now if you will know whether Corne shall be cheape or déere, take twelue principall graynes of Wheate out of the strength of the eare, vpon the first day of January,

and

and when the harth of your Chimney is moſt hot, ſweepe it cleane, then make a ſtranger lay one of thoſe Graynes on the hot hearth, then marke it well, and if it leape a little, Corne ſhall be reaſonably cheape, but if it leape much then Corne ſhall be exceeding cheape, but if it lye ſtill and mone not, then the price of Corne ſhall ſtand, and continue ſtill for that Moneth: and thus you ſhall vſe your twelue Graines, the firſt day of euery Moneth one after another, that is to ſay, euery Moneth one Graine, and you ſhall know the riſing and falling of Corne in euery Moneth, all the yeare following.

Signes from Thunder.

If it ſhall thunder much the firſt Sunday of the New-yeare, it ſhewes great death and mortallitie amongſt learned men: if it thunder the firſt Munday, it ſhewes great death of women, and many Eclipſes of the Sunne: if it thunder on the firſt Tueſday, it ſhewes plenty of Corne, but much Warre and diſſention: if it thunder on the firſt Wedneſday, it ſhewes mortallitie and death amongſt the worſt ſort of people, both Male and Female, beſides much Warre and bloudſhed: if it thunder on the firſt Thurſday in the New-yeare, it ſheweth much plenty of Corne that will follow: if it thunder on the firſt Friday, it betokeneth the loſſe of great perſonages, and men of authoritie, many affrayes and murthers, with much perill and danger. Laſtly, if it thunder vpon the firſt Saturday in the New-yeare, it foreſheweth onely a generall plague and infection, which ſhall raigne with ſtrong violence.

Signes of ſickneſs or health.

If you ſhall perceiue the Summer and Spring time to fall out very moyſt and rainy, without winde, yet in their owne natures very hot & ſcorching, or if the Southerne or Southweſt-winde blow much without raine: if many fogs and miſts fall in the Morning, and ouercome the Sunnes beames at none alſo: if the Sunne ſuffer any large Eclipſe: if Autumne and Winter be more foggy then moyſt or cold: if the Dowe or Leauen, of which you mould your bread, doe quickely mould and cleaue together without labour: if Dogs runne madde, if Birds

forsake their nests: if Sheepe rot: if Fennes, Marrish-grounds, and muddy places abound with Frogges: if Mud-wals breede Swine lice or Sowes: if Moales forsake the earth: if the small Pocks or Meazels be rife and abound in the Spring time, or if women generally doe miscarry in childe-bedde, any of these are most certaine signes of much sickenesse and mortallitie that will follow the yeere after: and all such signes as are directly contrarie to any of these, as if the Summer and Spring doe fall out dry and windy: if the South or Southwest winde bring with it euer rayne: if no fogs or mists oppresse the ayre, and so forth of all the rest which are before shewed, are most certaine and infallible tokens of a very wholesome and healthfull yeere, which will euer follow after.

The preseruation of health.

Now for the preseruation of your health, and to preuent all such sicknesses as are incident to follow in these casuall and daungerous yeeres: through euery seuerall moneth in the yeere you shall obserue these few precepts.

First, in the month of January you shall forbeare to let bloud, vnlesse vpon violent extreamitie, & that the signe be exceeding good for the same, you shall drinke white wine in the morning fasting, & rub your head with a course Towell very hard, but yet cleane, for it is a most wholesom friction.

In the month of Febuary, you shall not let bloud for wantonnesse, but neede: you shall forbeare Hearbe-pottage, for at that time onely they are least wholesome: you shall keepe the soles of your feete from wet, and vse euery morning your former friction.

In the moneth of March, the signe being good, you may let bloud according to your youth, strength, and necessitie: you may take hot and sweet meats and drinkes, especially Almonds, Figs & Reysins, & vse also your former friction.

In the month of Aprill, you may bleed as in the month of March: in it also you may purge, by the order of a learned directer: let your diet be hot and fresh meats, and your drinke temperate: also in this moneth your former friction is exceeding wholesome.

In

In the month of May be no ſluggard, for the bed is vnwholeſome, clearified Whay is this moneth a moſt ſoueraigne drinke, and Sage with ſweet Butter is a moſt excellent breakefaſt: yong Lettuce is an approued good Sallet, and the inthrals or offall of Beaſts would by all meanes be refuſed, it is alſo good to let bloud in this month onely for neceſſitie, and not for pleaſure, and beware by all means, not to go wetſhoed in the dew in the morning.

In the month of June obſerue the dyet of May, or if you be of youthfull bloud it is not amiſſe if it be a little colder, and for bleeding let it be for vrgent neceſſitie.

In the month of July eſchew all wanton bed-ſport: and if each morning you take a draught of clarified Butter-Wilke it is very wholeſome: vſe cole Julyps, and meats that are freſh, and not ſtirring: now forbeare Lettice, and bleede not, except it be in cauſe of great extreamitie.

In the month of Auguſt forbeare all manner of Worts, and Cabadges, and generally all meats and Spices which are hot and inflaming: but by any meanes bleed not at all, except by the direction of moſt approued learning.

In the month of September you may eate any ſort of ripe Fruits: you may bathe in hot bathes, for colde cauſes, at your pleaſure, and you may let bloud according to your neceſſitie: thoſe foods are beſt which are of lighteſt diſgeſtion, and thoſe drinkes moſt wholeſome which are rather ſtrong then ſcouring.

In the moneth of October, ſpare not any bloud, except great extreamitie compell you, and for your dyet, let it be of ſuch foods as are moſt ſtrong and nouriſhing, and your drinke Beere or Ale, of indifferent ſtrength, and now and then at the midſt, and end of meales, a draught or two of ſuch Wines as are pleaſant, ſtrong, and wholeſome: Sallets of Flowers, preſerued in Vinegar & Sugar, as either Violets, Brome-flowers, or Gelly-flowers of all kindes, or Sampyre, Purſlan, or Beane-cods, preſerued in pickell, are of excellent vſe, both in this moneth, and the other two which follow.

In the Moneth of Nouember open also no vaine, but for great need, because the blood is then gathered together into the principall vessels: Bathing in this Moneth is vtterly to be refused, onely let your body be kept warme, and euery colde humour or obstruction, rather dissolued by moderate frictions, as is shewed in the moneth of January and February, then by the violence of any other inward medicine. Shell-Fish in this moneth is very wholesome, and so are all other sorts of Fish, which are not too rawe or flymie.

In the Moneth of December blood-letting should be also forborne, except vpon some especiall dayes, as after the fiue and twentieth day at the soonest: and for your diet let it be meate which is hot and nourishing, but by no meanes that which breedeth melancholie blood. Vse strong Wine and sharpe Sauces: as for the warmth of your body, nert vnto good cloathing, let it euer proceed from exercise that is moderate, then from toasting, or broiling your selfe against the fire, for in this Monthy that body can hardly be sound whose shinnes are made pyde and motley with the fiers scorching.

And thus much touching the experience of the English Husbandman in these fore-knowledges, and ayming after the times to come, being drawne from the obseruations and rules left vs by succession of times of those learned Fathers, and other best knowne and approued in these knowledges: yet I doe not binde euery Husbandman to make as it were new Creeds of these Principles, but onely to giue them to his memory, as things that will neither oppresse nor hurt it, and if in any seldome-seene particularitie, any shall vary from the purpose of the relation, to remember that there is aboue vs a God of all Truth and knowledge, who will dispose and gouerne all things, according to his good Will and Pleasure: to which let euery Creature submit, in as much as hee onely knoweth what is for mankinde most best and most conuenient.

CHAP.

Chap. II.

The choyce of ground for the Kitchin-garden, and the ordering thereof.

A Promiſe honeſt and profitable, being ſeriouſly made, I holde a ſinne capitall to neglect, eſpecially where the goodneſſe ſtretcheth it ſelfe ouer a whole Kingdome: and hence I haue aſſumed to perfect both my promiſe and my labour in building vp that weake foundation which I formerly laid, of the Engliſh Husbandman: wherein, contrary to all other Authors, I am neither beholden to Pliny, Virgil, Columella, Varo, Rutillius, Libault, nor any other Forrainer, but onely to our owne beſt experienſt Countreymen, whoſe daily knowledge hath made them moſt perfect in their profeſſions: and what better inſtruction can be had then that which we receiue from the profeſſors, being men of our owne neighbourhood, acquainted with our Climate and Soile, and the neceſſary things agreeing with the bettering of the ſame: and not reſort, as our Tranſlators haue done, to ſtrangers helpe, who tels you that you muſt meanure your ground with Aſſes dung, when our Kingdome hath not ſo many foure-ſoted Aſſes as will meanure one Acre, and many ſuch like things which our Kingdome affordeth not: therefore according to the plaine true Engliſh faſhion, thus I purſue my purpoſe.

Touching the choyſe of Ground, I haue in the former part of this Booke ſhewed you the true nature and goodneſſe of euery ſeuerall Soyle: and you are to vnderſtand that the beſt Soyle is beſt for this purpoſe, becauſe it is leaſt laborſome, and moſt profitable: yet notwithſtanding that ſome of our tranſlated Authors doth vtterly diſalow for Gardens many Soyles, as namely, all Sands, all Chawkie earths, all Grauell, all Earths like duſt, and any Earth which chappeth or openeth in the heat of

The choyce of Ground.

Summer, by that meanes depriuing almost halfe our kingdome of the benefit of Gardens, yet I assure you there is no Soyle whatsoeuer (if it lye from the inundation of water, or be not absolutely boggy) but with industry will beare any Fruit, Herbe, or Flower, plentifully, and without any casualtie proceeding from the barraines therof: witnes a most worthy Garden in the barren Peake of Darbyshire, where there is no curious Tree or Plant wanting, nor doe they flourish in any place more brauely.

Now for mine owne part, I write generally to all Husbandmen, not to those onely which liue in fertile and fat Soyles, and therefore I would haue no man say, the Soyle where I liue is so barraine, that I cannot haue a Garden: for if the Soyle wherein you liue, be barraine, then shall you in the latter end of September breake vp your earth more then a Spade-graft deepe, and be well assured that at euery Spade-graft you breake the mould well, and leaue not the rootes of any weeds within it, then let it rest till the midst of October, at which time if any weeds appeare vpon it, by all meanes let them be pluckt vp by the roots, which done, you shall trench your ground at least a yarde and a halfe deepe, and then bury in those trenches, if it be a Sand or grauell earth, great store of Ore or Cow meanure, if it be a colde Chalkie Clay, or a moyst ground, then great store of Horse meanure, of both which meanures the oldest and rottenest is the best: but if you liue in such a Soyle as there is neyther of these meanures bred therein, then take straw of any kinde whatsoeuer, and spread it in the high-way where there is much trauell, & when it is rotten with the beating of Horse feet, then cause it to be shouelled vp, & with it fill your trenches, but if Straw be wanting, then if you haue any muddy ditches or ponds, scowre the mud out of them, & with it fill vp your trenches: & although these are not so long lasting as the two first sorts of meanures, yet they are sufficient to bring forth increase, & must supply where necessity inforceth, alwayes hauing discretion when you see your ground

The bettering of Grounds.

The trenching of Grounds.

abate

abate in fruitfulnes, to repleniſh it with freſh meanure.

Now as you fill your trenches with meanure, let one mixe the earth therewithall, and as it were blend and incorporate them together: thus hauing gone ouer ſo much ground as you intend to plant or ſowe vpon, you ſhall let it reſt till the midſt of January, at which time you ſhall breake it vp in trenches againe, but not aboue three quarters of a yarde deepe, and then fill vp thoſe trenches with meanure as before, and lay your earth as leuell as is poſſible, & ſo let it reſt till the beginning of March (if the weather be ſeaſonable for ſowing or planting) otherwiſe let it ſtay till mid-March, and as ſoone as the Moone is changed you ſhall then dig it vp the fourth time, and make it fit to receyue your ſeede, but in this fourth time of turning ouer your earth, you ſhall dig it but a little better then a Spade-graft depth, and euer as you dig it, mixe it with freſh meanure: if your ground be ſubiect to much chapping or riuing, then you ſhall at this laſt digging mixe the earth with aſhes and Horſe meanure mixt together, which will binde and holde the earth from chapping.

Of breaking the Garden moulde.

After you haue digd your ground in this order, and made it leuell, you ſhal with an Iron Rake breake the great clods of earth, and bring it to as fine a mould as is poſſible, euer obſeruing that if in the breaking of the clods or otherwiſe, you perceiue the roots or ſtalks of any weeds to ariſe, you ſhall preſently with your hand pull them out, and caſt them on heaps, that they may ſerue eyther for the fire or the dunghill: which done, you ſhall tread out your beds in ſuch orderly ſort, that you may paſſe from one to the other without eyther treading vpon the beds, or ſtriding ouer them: & thus much for the barraine & ſterrill ground, which although all ancient & late writers reiect, as not worthy to be imployed to this vſe, yet beleeue it, being husbanded as is ſaid before, it will equall in fruitfulnes the beſt ground.

Ordering of Garden beds.

Of the fruitfull Soyle.

Touching your rich and perfect grounds, which of themſelues are apt to put forth with little labour, you ſhall onely at the latter end of September breake vp the earth,

Earth, and making greater Trenches, fill them well with Ore meanure, and then turning the Earth vpon the meanure, leuell your ground very carefully, breake the clots and rake it very painefully, and then treade out your beds, as is before sayd, artificially: but if the ground which you breake vp, be eyther græne-swarth, or much ouergrowne with wæds (as these rich soyles must euer be the one or the other) (for they will not be idle, but continually bringing forth) then at this first digging and dunging you shall haue diuers which shall follow the Spade, who shall take away all manner of roots, græines, grasse-tufts, stones, or whatsoeuer may brede anoyance to the ground: which worke being perfected, you shall let the ground rest all winter till the beginning of March, that the frost may mellow and ripen the mould, and also kill the roots of such wæds as the Spade hath turned vp, and haue bæne omitted to be pulled away.

Now so sone as March is come, vpon the first change of the Mone, you shall digge vp this Earth againe, leuell it, and order it in all points as was sayd of the barraine Earth, onely there will nede no more vse of meanure, but as sone as it is digged, raked, leuelled, and brought into a fine mould, you may then tread out your Beds, as afore sayd, euer proportioning the quantitie of them according to the quantitie of your sedes, hauing the most of that which is most in vse, and the least of the contrary.

Now as touching the fencing and inclosing of your Garden, I haue in the former Booke shewed you the same at large, and giuen seuerall instructions, according to mens seuerall abilities, with this caution, that whether your fence be wall, pale, dead-hedge, ditch, or quickset, yet it must be so high that it may with assurance kæpe all manner of Pullen from flying ouer the same, who are the greatest enemies to a Garden that may be.

The necessariest Ornament in a Garden.

There would be also in this Kitchin-Garden, if with conueniency it may be brought to passe, eyther a Pumpe, Well, or Cesterne, which might flow continually with water

water all the Summer time, for the watering of Hearbs, as ſhall be hereafter declared. And thus much touching the choyce of ground for a kitchin-garden, and the ordering of the ſame.

Chap. III.

Of the ſowing and ordering of all manner of Pot-hearbs.

When you haue prepared your ground, and caſt your beds in an orderly faſhion, as is before ſpoken, you ſhall then take your Séeds which Séeds would by no meanes be aboue a yéere olde: and hauing ſorted them ſeuerally, euery one by it ſelfe, and appointed the beds which ſhall ſeuerally receiue them: you ſhall in this manner ſowe your Pot-hearbs, which craue not much rote, becauſe their onely benefit is in the leafe: take your ſeeds and put them into a wooden Tray, then take of your Garden moulde, the fineſt that may be, being made almoſt as fine as aſhes, and mixe your Séeds, and that mould very well together, then goe to the bedde where you meane to beſtow them, and hauing newly rackt it (to ſtirre vp the freſh mould) with your hand ſprinkle and ſowe them all ouer the bed, ſo thicke as may be: which done, with a fine Rake, rake the bed gently ouer, then taking ſpare fine mould, put it into a ridling Siue, and ſift it ouer the bed better then two fingers thickeneſſe, and ſo let it reſt: thus you ſhall doe ſeuerally with euery ſéede one after another, beſtowing euery one vpon a ſeuerall bed.

Of all ſorts of Pot-hearbs.

Now for your Pot-hearbs, which are moſt generally in vſe, they be theſe: Endiue and Succorie, which delight in moyſt ground, and will endure the winter. Bleete of which there be two kindes, Red and White: this Hearbe neuer néedeth weéding, and if he be ſuffered to ſhed his ſéed

Of *Endiue* and *Succorie*.

it will hardly euer to be got out of a Garden.

Of Beets. Then Beets, which must be much weeded, for they loue to liue by themselues, and if they grow too thicke you may take them vp when they are a finger long in their owne earth, and set them in another bed, and they will prosper much better.

Land-Cresses. Then land Cresses, which is both a good Pot-hearbe, and a good Sallet-Hearbe: it loueth shadowie places, where the Sunne shineth least, and standeth in need of little dung.

Parcely. Then Parcely, which of all Hearbs is of most vse, it is longest in appearing aboue ground, and the elder seed is the quicker in growth, but not the surer; but eyther being once come vp increase naturally, and doe hardly euer decay: it cannot grow too thicke, but as you vse it you must cut off the toppes with your knife, and by no meanes pull vp the rootes: if it be put into a little purse, and beaten against the ground, to bruise it a little before it be sowne, it will make it haue a large crisped leafe.

Of Sauory. Then Sauory, of which are two kindes, the Winter-Sauory, and Summer, both delight in leane ground, and are quicke of growth, and long lasting.

Of Time. Then Time, of which are also two kindes, the running Time, and the Garden Time: they delight in fertile ground, and from the seede are very slow of growth, therefore it is best euer to set them from the slip. The running Time doth delight in the shadow, but the Garden Time in the Sunne.

French Mallowes. Then French-Mallowes, which will ioy in any ground, and are quicke of growth.

Cheruill. Then Cheruill, which will not by any meanes grow with any other Hearbe.

Of Dill. Then Dill, which may be sowne almost in any moneth of the yeare as well as March: it endureth all weathers, but loueth the warmth best.

Of Isop. Then Isop, which in like manner as Time is, slow of growth from the seed, and therefore fitter to be set from

the

the ſlips, after it hath once taken roote it encreaſeth wonderfully, and will hardly be deſtroyed.

Then Mints, which flouriſh onely in the Summer time, but dye in the Winter, it delighteth moſt in the moyſt ground. Of Mints.

Then Violets, the leaues whereof are a good Pot-hearb, and the Flowers preſerued in cloſe glaſſe pots, with ſtrong Wine-vinegar and Sugar, a moſt excellent Sallet: it doth delight to grow high, and will grow ſpeedily eyther from the plant or from the ſeed. Violets.

Then Baſill, which would be ſowne in the warme weather, as at the beginning of May, for the ſeed is tender, and when you haue ſowne it, you ſhall preſſe the earth downe vpon it with your feet, for the ſeede can endure no hollowneſſe: if you ſowe it at the fall of the Leafe, you ſhall ſprinkle the ſeede with Vinegar, and when you water it let the Sunne be at his height. Of Baſill.

Then ſweet Marioram, which would be ſowne on rich ground, and farre from Sunneſhine, for it taketh no delight in his beames. Sweet Marioram.

Then Marigolds, which renew euery moneth, and endure the Winter as well as the Summer: this Hearbe the oftner you remoue it, the bigger it groweth. Marigolds.

Then Strawberries, whoſe leaues are a good Pot-hearbe, and the fruit the wholeſommeſt berry: this Hearbe of all other, would be ſet of the plant, and not ſowne from the ſeed, for the oft changing and remouing of it cauſeth it to grow bigger and bigger: it groweth beſt vnder the ſhadowes of other Hearbes, but very ſufficiently in beds, or elſe where. Of Strawberries.

Then Borage and Bugloſſe, both which are of one nature: they would be ſowne in ſmall quantity, for where they take they will runne ouer a whole Garden: the ſeed muſt be gathered when it is halfe ripe it is ſo apt to ſhed, and when you gather it you muſt plucke vp the ſtalkes, leaues & all, and ſo laying them one vpon another three or foure dayes, their own heat will bring the ſeed to ripenes. Of Borage and Bugloſſe.

Of Rosemary.

Then Rosemary, which is an Hearbe tender and curious, yet of singular vertue: it is some staine with frost or lightening: it will grow plentifully from the sæde, but much better from the slip, it delighteth to be planted against some Wall where it may haue the reflection of the Sunne, for to stand vnpropped of himselfe, the very shaking of the winde will kill it.

Of Penyroyal.

Then Penyroyall, which most properly is vsed to be mixt with Puddings, made of the bloud of Beasts, & Oatmeale: of it there be two kindes, Male and Female: the Male beareth a white flower, and the Female a purple: it must be sowne in small quantity, for it will runne and spread ouer-much ground: it delighteth most in moyst earth.

Of Leekes.

Then Leekes, which would haue a fertile ground, and as soone as they be shot vp a good length you shall cut the blades to the polt, and then remoue the heads, and set them borderwise about your other beds: this remouing after the cutting off the blades, will make them grow bigger, and prosper better, as for thrusting Oyster-shels or Tyle-shreads vnder them, to make the heads bigger, it is a toy, for if the mould be lose and good, the Lèeke will come to his perfect growth: they may be sowne both in March, Aprill, May, and June, and they may be remoued all July, August, September and October.

Of Onions.

Then Onions, which differ not much from the nature of Lèekes, they loue a fertile Soyle, and would be sowne with the sæds of Sauoy: when they come vp if they grow too thicke, as is often séene, you shall plucke vp some and spend them in the Pot and in Sallets, to giue the rest more roome, and some you shall take vp and replant in other beds, which you may preserue for sæde: those Onions which you would not haue to sæde, you shall cut off the blades in the midst, that the iuyce may descend downeward, and when you sée the heads of the Onions appearing aboue the earth, you shall with your fèet tread them into the ground: there be some very well experienst

Husbands,

Husbands, which will take the fayrest, goodliest and soundest Onions they can get, and in this moneth of March set them three fingers deepe in the earth, and these of all other bring forth the purest and best seede, for which purpose onely they are preserued: as sone as your seed-Onions are knotted, you shall vnderpropp them with square cradles, made of stickes, least the waight of the boules which carry the seede, should breake the blades.

The time of gathering your seede is, when it is all turned purely blacke, and the time of gathering the Onions is, when the heads doe forsake the earth, after they be gathered you shall lay them on a dry floore for a fortnight, or more, and then binde them vp in ropes, and hang them where they may haue the ayre of the fire, onely note that shall gather your Onions in the increase of the Moone, as they were sowne, and not otherwise. Of gathering Onion-seede, or the Onion.

Many other Pot-hearbs there be, which for as much as they differ nothing, eyther in sowing, planting, or ordering, from these which I haue rehearsed, I will heere omit them, and thinke this sufficient, touching the sowing and ordering of all manner of Pot-hearbs.

Chap. IIII.

Of the sowing of certaine Hearbs, which are to be eaten, but especially are medicinall, yet euer in the Husbandmans Garden.

OF Hearbes which are medicinall, I will begin with Arage, or Orache, which being colde and moyst is very excellent against the hot Gout: it is to be sowne in any moneth, from February till December: it loueth much moisture, and therefore must be oft watered: it must be sowne exceeding thinne, and quickly couered, for the ayre is offensiue. Of Arage.

Of Lumbardy Loueage.

Next it is Lumbardy, Loueage, which being hot and dry, is very purgatiue, it desireth a very fruitfull ground, but if it be sowne where it may haue much shadow and some shelter accompanied with moysture, it will grow in any ground, the moneths for sowing thereof, is, from the midst of Februarie till Haruest.

Of Fennell.

Fennell is also hot and dry, and it comforteth the stomacke, openeth the inward vessels, and helpeth disgestion; it may be sowne in any moneth, and vpon any indifferent ground, especially if it be a little stony, the seede would not be very old, though of all other it be the longest laster.

Of Anise.

Anise is hot and dry, it dissolueth humors and obstructions, and is very comfortable to weake stomacks, it delighteth in a good and lose mould, and is to be sowne in the height of the Spring onely.

Of Comin.

Comin is of the nature of Anise and Fennell, and mirt with either, is very soueraine against all inward sicknesses proceeding from cold, it loueth a fruitfull rich earth & much warmth, and therfore the later it is sowne in the Spring, it is so much the better, and aboue all things it would be sowne in the hottest time of the day, & if it be mixed with other seeds, it is so much the better, and appeareth the sooner.

Of Coliander.

Coliander is of the nature of the earth, cold & dry, it helps disgestion, & suppresseth vapours which offend the braine, it may be sowne vpon any indifferent ground, & in any month except December and January, the elder the seedes are the better so they be sound, and they desire much watering.

Of Rue.

Rue or Hearb-grace is hot and dry, & is very soueraigne against all inward infection, putrifactions, and impostumations, it ioyeth in any reasonable ground so it grow warme and dry, the moneths fittest for the sowing thereof, is March, Aprill or May, and the mould would be firme and not subiect to ruyning, whence it procedes that no meanure is so good for the encrease thereof as horse-dung and ashes mirt together: the beds would be made high & descending, that no moysture may stay thereon, they must be carefully weeded, for in their first growth otherwise they are soone choaked.

Organic

Organie is hot and dry, and excellent againſt any ſickneſſe of the liuer, the ground in which it moſt ioyeth would be a little ſtonie, and full of rubbiſh, yet by no meanes vndunged, the moneth fitteſt for the ſowing thereof is March and September, the Moone being in Libra or any other moiſt ſigne, it muſt be continually watred till it appeare aboue the earth, but after forborne, for being once well fixed, it is euer certaine. Of Organie.

White Poppy is cold and moyſt, and much prouoketh ſléepe: it delights to be ſowne in a rich, warme, dry ground, in the moneths of March, September or November. Of white Poppy.

Germander is hot and dry, and excellent againſt the Kings euill; obſtructions of the Spléene and hardneſſe of Vrine; it is a hard hearbe, and will proſper in any ground, it is to be ſowne, either in the ſpring or fall of the leafe, and is moſt comly for the ſetting forth of knots in Gardens. Of Germander.

Cardus Benedictus, or the bleſſed Thiſtell, is hot and dry, it is very ſoueraine againſt moſt inward ſickneſſes, ſtancheth blood, and is a great comforter of the braine, it delighteth in a rich ground and a looſe well tempered mould, it muſt be ſowne very ſhallow, and not couered aboue two inches déepe, the firſt quarter of the Moone is beſt to ſowe it in, and in the moneths of March, May or September, if you ſowe a little fine ſtaren Wheat with it, no doubt but it will proſper the better. Of Cardus Benedictus.

Angellica is hot and dry, it openeth and diſſolueth obſtructions, is an excellent cordiall againſt poyſon, and all infections, it helpeth the colliche, and cureth the biting of madde dogges or venemous beaſts, it loueth a fruitfull dry mould, but may not indure the trouble of wéedes, it is to be ſowne in March or Aprill, & it flouriſheth in July & Auguſt, it hath a ſwéet odour, and helpeth all euill & infected ayres. Of Angellica.

Valerian is hot & dry and preuenteth infection, it helpeth ſtitches and other griefes proceéding from windy cauſes, it loueth to grow in moiſt and low places, the ground being well meanured, and till it be ſhot at leaſt a handfull high, Of Valerian.

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it must be kept with continuall watring, the moyst est time of the yeere is the best to sowe it in.

Of Elecampana.

Elecampana, is hot and moyst, and good for offences in the lungs, or any outward ioynt, being troubled with paine proceeding from colde: it is better much to be set then sowne, yet notwithstanding it may safely enough be sowne at any time after mid-March, the ground being rich, soft, and loose, and the seede strowed very thinne, and at least two fingers distance one from another.

Of Pepperwort.

Pepperwort is hot and drye, yet of the two much more hot, it is good against all kinde of aches, and other paine in the ioynts, or sinewes: it delighteth in a rich blacke Soyle, fat and lose: it would be sowne in Febr uary, and removed in September.

Of Philipendula.

Philipendula is very hot and dry, and is good against abortiue births, Stone, Strangury, or any grieke proceeding from colde causes: it may be sowne in any barraine, stony, or grauelly Soyle, in the months of May, Aprill, or September: it neither desireth much weeding, nor much watering, but being once committed to the ground appeareth sodainely: and thus much of those Hearbes which are fit for Medicine, of which though there be many others, yet they differ not in their ordering from these already declared.

Chap. V.

Of diuers sorts of Sallet-Hearbes, their manner of sowing and ordering.

Of Lettuce.

Amongst the many numbers of Sallet-Hearbes I thinke it not amisse to beginne first with Lettuce, which of all other whose vertue is helde in the leafe, is most delicate, tender, and pleasant: the ground then in which it most delighteth, is that which is most fertile, best laboured, and of the finest mould,

mould, being ſoft, loſe, and more enclining to moyſture then drineſſe: it may be ſowne in any moneth of the yeare, from Februarie to Nouember; it is very quick of growth, and will appeare aboue the earth in foure dayes after the ſowing: it would at firſt be ſowne thicke, and carefully kept with morning and euening watrings, if the ſeaſon be dry, but not otherwiſe: after it is growne and faire ſpread aboue the earth, which will be in a moneths ſpace or there-abouts, you ſhall chuſe out the faireſt and goodlieſt plants, and taking them vp with the earth and all, about their rootes, replant or remoue them to a new bed of freſh mould, and there ſet them a foote diſtance one from another, and fire their rootes faſt and hard into the ground: then couer or preſſe them downe with Tyle or Slate ſtones, to make them ſpread and not ſpring vpward, by which meanes the leaues will gather together, and cabbadge, in a thicke and good order, for it is to be vnderſtood, that the oftner you remoue your Lettuce, the fairer and cloſer they wil cabbage. There be diuers which obſerue to remoue Lettuce as ſoone as fiue leaues are ſprung aboue the ground; but I like better to remoue them when they begin to ſpindle: they are moſt eſteemed in the moneths of Aprill, May, and June, for in July they are ſuppoſed to carrie in them a poyſonous ſubſtance.

Next the Lettuce I preferre the hearbe Spynage, which delighteth in a well-dunged earth, and may be ſowne in Aprill, March, September, or October: it would not be mixed with other ſeedes, becauſe it proſpereth beſt alone. Of Spynage.

Sparagus ioyeth in a fertill moiſt ground, the mould being made light which couers it, and the ground wel dunged, the Spring is the beſt time to ſowe it, and it muſt be ſowne in long furrowes or trenches made with your finger, and not vniuerſally ſpread ouer the bed as other ſeeds are: it loueth moyſture, but may not endure the wet to lye long vpon it, and therefore the beds would a little deſcend it: muſt not be remoued till the rootes be ſo feltred Of Sparagus.

together, that they hinder the new branches from spring-ing vp, which commonly is two yeares.

Of Colworts. Colworts or Cabbadge seede delighteth in any well husbanded ground, and may be sowen in all sorts and seasons as Lettuce is, and must also in the like manner be remoued, after the principall leaues are come forth, which will make them to gather together, and cabbadge the better: and as they may be sowen in any season of the yeare, so likewise they may be remoued at all seasons likewise, except the frost or other vnseasonable weather hinder you: and although some men will not allow it to be sowen in clay grounds, grauell, chalke, or sand, yet they are deceiued; for if the earth be well ordred, they will grow plentifully, onely you must obserue when you remoue them to let them haue earth come enough.

Of Sage. Sage is in Gardens most common, because it is most wholesome, and though it may be better set from the slip then sowen in the seede, yet both will prosper, it loueth any well drest ground, and may be sowen either in Februarie, March, September, or October: it loueth also to grow thick and close together, and will of it selfe ouercome most weedes: it asketh not much dung, neither too great care in watring, onely it would be oft searched, for Toades and other venemous things will delight to lye vnder it, the more Sunne and ayre it hath, the better it is.

Of Purslane. Purslane is a most excellent Sallet hearbe, and loueth a fertile soile, and though it may be sowen almost in any moneth, yet the warmest is the best, as Aprill, May, June, or Septemb. Buck ashes are an excellent meanure for them, and for most Sallet hearbs else, but aboue all they loue dry dust and house-sweepings, they are apt to shed their seede, whence it comes that a ground once possest of them will seldome want them, they may also be remoued, and will prosper much the better.

Of Artichokes Artychokes loue a fat earth, and may be sowen in Februarie or March, the Moone encreasing, the seedes must not be sowen together, but set one by one a good distance asunder;

asunder; they must lye somewhat deepe, and be firmely couered; yet if you can procure them, I rather wish you rather to set them from Slips or young Plants, then sowe them from the seedes, for they doe so naturally loue the earth, that you can hardly slip so small a leafe from an Artychoke as will not take roote; if you sowe the seede, you must be carefull to weede and water them well, for the first leaues are very tender: also if you remoue them after their first springing, the fruit will be bigger and better.

Garlicke is best in September and Nouember, to be set from the cloue, in & about the borders of beds, or other seedes, halfe a foote one from another, and in February, March, and Aprill, to be sowen from the seede: it must be ordered as you order Onyon seede, it loues not much wet nor extreame drought, onely it desires a good mould which is rich and firme, yet not too much dunged. Of Garlicke.

Raddish loueth a fertile ground, that is well dunged, chiefly with mans ordure, that is deepe trenched, and hath an easie and light mould, and the seedes would be placed either in rowes, or about the borders of beds, as you doe Garlicke: the manner of sowing it is with a dibble or round sticke, to make a hole into the ground almost a foote deepe, and then into that hole to put not aboue two seedes at the most, and then close the hole vp againe, and let the holes be foure fingers one from another, it may be sowen in most months of the yeare if the frost hinder not, and to make the roote large & tender, and to keepe the branch from seeding; you shall as it springs crop off the principall leaues which grow against the heart of the root: to tread them downe into the earth after they haue fast roote is good also. Of Raddish.

Nauew, if the earth haue any small goodnesse in it will grow plentifully, neither is offended with any ayre, onely the mould would be lose and rough, for otherwise it many times turneth to Rape: the seede naturally commeth vp very thicke, therefore it is expedient to remoue them and plant them thinner, for that best preserueth their Of Nauew.

natures, they may be sowne in Februarie, March, Aprill, September, or October.

Of Parsneps and Carrets.

Parsneps or Carrets are of one and the selfe nature, they delight in a good fat earth, and would be sowne reasonably thicke, in long deepe trenches like furrowes, having a gentle and easie mould either in the moneth of January, Februarie, or March, or in September, October, or December, they must be carefully well weeded, and if the earth be fat, they neede not much watring or other attendance.

Of Pompyons.

Pompyons, Gourds, or Mellons, desire a very good ground, or by Nature or Art, the seedes must be sowne very thinne, as at least halfe a foote one from another, they would lye reasonably deepe, yet the mould very gentle which couers them, they are subiect to spread and runne ouer much ground, therefore as they grow you must direct their stemmes, so as they may not annoy one another, and when they flower you shall lay broad Tiles or Slate stones vnder them, that the fruit nor flower may not touch the earth; if you plash them vp against trees or walles where they may haue the reflection of the Sunne, the fruit will be larger, pleasanter, and soner ripe: they neede no weeding nor watring after you see them appeare aboue the earth, and the best seasons to sowe them in, is Februarie, March, or Aprill, those are the best Pompyons which haue the smallest seedes, and are of the most yellowest complexion.

Of the Cowcumber.

Cowcumber, is a delicate, pleasant, yet very tender fruit, and delighteth in an extraordinarie fat earth, especially during the opening or sprouting of the seede, therefore the best and most vndoubted safest way for sowing them, is, first in some corner of your Kitchin garden to make a bed of two or three yards square of olde Oxe dung, and Horse dung mixt together, and at least a yard or better high from the earth, then couer this bed of dung with the richest garden mould you haue, better then halfe a foote thicke: then thereon place your seedes halfe a foote likewise

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one from another, and be most sure that your sædes be hard and sound (for any softnesse in them shelweth rottennesse) then couer them foure fingers thicke with the like mould: then within seauen or eight dayes, after you shall sée them appeare aboue the earth, but in any wise let them continue still till the principall leaues be come forth, and they begin to créepe out in length, then with your hand griping the whole plant, take it vp by the rootes with the earth and all, and plant it in a bed new digged & trimmed for the purpose with a rich lose mould, and so replant and remoue each roote seuerally one after another, and they will grow and bring forth in great plenty. Now by the way you must obserue, that as sone as you haue sowne your sædes you shall prouide a Mat, Canuasse, or other couering, which being placed vpon stakes ouer the dung bed, shall euery night after Sunne-set be spread ouer the same, and not taken away till the Sunne be risen in the morning, for this will defend the sædes from frosts and other cold dewes which are very dangerous. Now if any demand why these sædes are thus sowne first on the bed of dung, they shall vnderstand that besides the warmth and fertility thereof, that the sædes are so pleasant and tender, that wormes and other créeping things in the earth will destroy them before they can sprout, which this bed of dung preuenteth. The months most fit for sowing these sædes, are Aprill, May, and June onely, for other are much too colde, and in this manner you may sowe any tender sæde whatsoeuer.

Of the Beane of Egipt.

Beanes of Egipt delight in a moyst watrish ground, rather fertile then any way giuen to barrainnesse, yet will plentifully enough prosper in any indifferent earth: they are rather to set then sowe, because they must take strong roote, and be fixed somewhat dæpe into the earth, and the moneth which is most proper for them, is the latter end of January, all Februarie and the beginning of March onely.

Of Skerrets.

Skerrets are a delicate roote, white, tender, and pleasant, little differing in taste or excellencie from the Eringo.

They delight in a rich mould, moyst and well broken, and must be set deepe in the earth: after they be a finger length aboue the ground they would be remoued, and planted in a fresh mould, which will preserue them from speedie seeding, for when they runne to seede, they lose the vertue of their rote. The moneths fittest for the sowing of them, is March, Aprill, and May, and if you desire to haue them all Winter, you may then sowe them in September and October. And thus much for Sallet-hearbs, and rotes of all natures, of which kindes though there be diuers other, yet you shall vnderstand, all are to be ordered in the manner of these before rehearsed, that is to say, such as haue their vertues in the stalke or leaues, like Spynage, Sparagus, Purslayn, and such like, those which cabbadge or knit together in hard lumps, like Lettuce, Colworts, and such like, and those whose goodnesse liues in their rotes, like Raddish, Carrets, Skerrets, and such like.

A most necessary obseruation.

Now for a most necessarie obseruation, euery Gardner ought to beare this rule in his memorie, that all Pothearbs must be sowne thicke, and but thinly couered, as namely not aboue three fingers: all hearbs which cabbadge must be sowne thicke, and deeper couered, as a full handfull at least, and in their remouing planted thinne, and well fixt into the earth: and all rotes must be sowen thinne and deepe, as almost a foote either let into the ground, or strewed in deepe furrowes, digged and laide vp for the purpose, in which the quantity of your seede must onely direct you: for if you haue occasion to sow hardly a handfull, then you may set them one by one into the ground at your leasure, but if you haue occasion to sowe many Pecks or halfe Pecks, then you shall turne vp your earth into deepe furrowes, and in the bottome thereof scatter your seede, and after rake it into a leuell, and you shall not onely saue much labour, but gaine your purpose.

CHAP.

Chap. VI.

Of Flowers of all sorts both forraigne and home-bred, their sowing, planting, and preseruing.

HAuing written sufficiently of Pot-hearbs and Sallet-hearbs, which are the ornaments of the Husbandmans Kitchin or Table, I will here speake of flowers, which either for their smels, beauties, or both, are the graces of his Chamber. And first, because my maine ayme and scope is English Husbandrie, I will begin with those flowers which are most proper and naturall for our climate, of which because I holde Roses both for their smell, beauties, and wholesomnesse to exceede all other, I thinke it not amisse to giue them the first place and precedencie before all other.

You shall vnderstand then that Roses are generally and aunciently but of three kindes, the Damaske, the red, and the white, and what are different from these are but deriuations from them, being by grafting, replanting, and phisicking, somewhat altered either in colour, smell, or doublenesse of leafe. Of Roses.

To speake then first of the Damaske Rose, it is fit that all husbandmen know, that Roses may as well be sowne from the seede, as planted from the roote, Syen, or branch onely, they are the slower in comming vp, more tender to nourish, and much longer in yeelding forth their flowers, yet for satisfaction sake and where necessitie vrgeth, if of force or pleasure you must sowe it from the seede, you shall chuse a ruffish earth lose and well dunged, and you shall cast vp your beds high and narrow: the moneth which is fit for their sowing is September, and they must be couered not aboue foure fingers deepe, they must be defended well all the Winter from frosts and stormes, and then they will beare their flowers plentifully all the next Spring Of the Damaske Rose.

Spring following; yet this is to be noted, that all Roſes which riſe from the ſeede ſimply, their flowers will be ſingle like the Eglantine, or Cyphanie, therefore after your plants are two yéeres olde, you muſt graft one into another, as you doe other fruit, and that will make them double and thicke: alſo you muſt remember that thoſe yellow ſmall ſéedes which are in the midſt of the Roſe, are not true Roſe ſéedes, but thoſe which lye hid in the round peare knob vnder the Roſe, which as ſone as the leaues are fallen away, will open and ſhew the ſéede. And thus much touching the ſowing of all ſorts of Roſes, which is for experience and knowledge ſake onely, for indéede the true vſe and property of the Roſe is to be planted in ſhort ſlips about fourtéene inches long, and the ſmall taſſels of the roote cut away, they would be ſet halfe a foote into the ground, in the ſame manner as you ſet ordinary Quick-ſet, and of like thickneſſe, rather a little flope-wiſe then vpright: and though ſome thinke March the beſt ſeaſon, yet doubtleſſe September is much better for hauing the roote confirmed all the Winter, they will beare the ſoner and better all the Sommer following; you muſt be carefull to plant them in faire weather, and as néere as you can vnder ſhelter as by the ſides of walls, and ſuch like couert where the Sunne may reflect againſt them, and if they be planted on open beds or borders, then you muſt with Poales and other neceſſaries ſupport and hold them vp, leaſt the winde ſhake their rootes and hinder their growing.

Of the red Roſe.

The red Roſe is not fully ſo tender as the Damaſke, neither is it ſo pleaſant in ſmell, nor doubleth his leaues ſo often; yet it is much more Phiſicall, and oftner vſed in medicine, it is likewiſe fitter to be planted then ſowen, and the earth in which it moſt ioyeth would be a little rough or grauelly, and the beſt compaſſe you can lay vnto it, is rubbiſh, or the ſweéping of houſes, the moneths to ſowe or plant it in is March or September, & the time to prune and cut away the ſuperfluous branches is euer the midſt of October.

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The white Roſe is of leſſe ſmell then the red, and will grow in a harder ground, his vſe is altogether in Phiſicke as for ſore eyes and ſuch like: it will grow into a Tree of ſome bigge ſubſtance, and is ſeldome hurt with froſts, ſtormes, or blaſtings: it would likewiſe be planted from the rote againſt ſome high wall, either in the moneth of Februarie or March, and the oftner you plant and replant it, the doubler and larger the flower will be: for the earth it much ſkilleth not, becauſe it will grow almoſt in euery ground, onely it delights moſt in the ſhadow, and would be ſeldome pruned, except you finde many dead branches. Of the white Roſe.

The Cinamon Roſe, is for the moſt part ſowen, and not planted, whence it comes that you ſhall euer ſee the leaues ſingle and little, the delicacie thereof being onely in the ſmell, which that you may haue moſt fragrant and ſtrong, you ſhall take a veſſell of earth, being full of ſmall holes in the bottome and ſides, and fill it with the richeſt earth you can get, being made fine and looſe, then take Damaſke Roſe ſeedes which are hard, and ſound, and ſteepe them foure and twenty houres in Cinamon water, I doe not meane the diſtilled water, but faire Conduit water, in which good ſtore of Cinamon hath bin ſteeped, or boyled, or milk, wherein good ſtore of Cinamon hath bin diſſolued, and then ſow thoſe ſeedes into the Pot, and couer them almoſt three fingers deepe, then morning and euening till they appeare aboue the earth, water them with that water or milke in which the ſeedes were ſteeped, then when they are ſprung vp a handfull or more aboue the ground, you ſhall take them vp mould and all, and hauing drest a border or bed for the purpoſe, plant them ſo as they may grow vp againſt ſome warme wall or pale, and haue the Sunne moſt part of the day ſhining vpon them, and you ſhall be ſure to haue Roſes growing on them, whoſe ſmell will be wonderfull pleaſant, as if they had beene ſpiced with Cinamon, and the beſt ſeaſon of ſowing theſe is euer in March, at high noone day, the weather ſhining faire, and the winde moſt calme. Of the Cinamon Roſe.

To make the Cinamon Rose grow double.

Now if you would haue these Roses to grow double, which is an Art yet hid from most Gardners, you shall at Michaelmasse take the vppermost parts of the Plants from the first knot, and as you graft either Plumme or Apple, so graft one into another, and couer the heads with earth or clay tempered with Cinamon-water, and they will not onely grow double, but the smell will be much sweeter, and loke how oft you will graft and regraft them, so much more double and double they will proue.

Of the Prouince Rose.

The Prouince Rose is a delicate flower for the eye more then the nose, for his oft grafting abateth his smell, but doubleth his leafe so oft that it is wonderfull; therefore if you will haue them large and faire, you shall take the fairest Damaske Roses you can get, and graft them into the red Rose, and when they haue shot out many branches, then you shall graft each seuerall branch againe with new grafts of another grafted Damaske Rose: and thus by grafting graft vpon graft, you shall haue as faire and well coloured Prouince Roses, as you can wish or desire: and thus you may doe either in the Spring or fall at your pleasure, but the fall of the leafe is euer held the best season.

To make Roses smell well.

Now if your Roses chaunce to lose their smels, as it oft happeneth through these double graftings: you shall then plant Garlicke heads at the rootes of your Roses, and that will bring the pleasantnesse of their sent vnto them againe.

Generall notes touching Roses.

Now for your generall obseruations, you shall remember that it is good to water your Roses morning and euening till they be gathered; you shall rather couet to plant your Roses in a dry ground then a wette; you shall giue them much shelter, strong support, and fresh dung twise at the least euery yeare, when the leafe is fallen, you shall cutte and prune the branches, and when the buds appeare you, then begin your first watring.

Lauender

Lauender is a flower of a hot smell, and is more estéemed of the plaine Country housewife then the dainty Citizen: it is very wholesome amongst linnen cloathes, and would be sowen in a good rich mould, in the moneths of March or Aprill. Of Lauender.

The white Lilly would be sowen in a fat earth, in the moneths of October and Nouember, or in March or April, and the séedes must be sowen exceéding thinne, not one by any meanes touching another, and the mould which couereth them must be sifted gently vpon them. Of the white Lilly.

If you would haue your Lillyes of a purple colour, you shall steépe your séedes in the Lées of red wine, and that will change their complexion, and also you shall water the Plants with the same Lées likewise: if you will haue them scarlet red, you shall put Vermillion or Cynaber betwéene the rinde and the small heads growing about the roote: if you would haue them blew, you shall dissolue Azure or Byse betwéene the rinde and the heads, if yellow Orpment, if gréene Verdigreace, and thus of any other colour. To make Lillyes of any colour.

Now to make them flourish euery moneth in the yéere, you shall sowe your séedes some a foote déepe, some halfe a foote, and some not two inches, so they will spring one after another, and flourish one after another. To make Lillyes flourish all the yeere.

The wood Lilly or Lilly of the vale, delighteth most in a moyst ground, and may be sowen either in March or September, it is very faire to looke on, and not so suffocating in smell as the other Lillyes are. Of the wood Lilly.

The flower de Lice is of excellent beauty, but not very pleasant to smell to, it loueth a dry ground & an easie mould, and is fittest to be sowen in the moneth of March. Of the flower de Lice.

Pyonie or the blessed Rose, loueth a good fat earth being somewhat lose, and may be sowen either in March or September, it asketh not much watring, onely some support because the stalkes be weake. Of Pyonie.

Petillius or Indian eye, may be sowen in any ground, for it desireth neither much water, nor much dung, and Of Petillius.

the best season for sowing, it is June or September, for it will beare flowers commonly all the Winter.

Of Veluet flower.

Veluet flower loueth a rich fertile ground, and must be much watred: the season best for the sowing is August, for commonly it will beare flowers all the Winter.

Of Gylliflowers.

Gilliflowers are of diuers kindes, as Pynks, Wall-flowers, Carnations, Cloue-Gilliflowers, and a world of others, which are of all other flowers most sweet and delicate: all but the Wall-gilliflower loue good fertile earths, and may be sowen either in March, July, or August. They are better to be planted of Slips then sowen, yet both will prosper. They are very tender, and therfore the best planting of them is in earthen Pots, or halfe Tubs, which at your pleasure you may remoue from the shade to the Sunne, and from the roughnesse of stormes to places of shelter, they grow vp high on long slender stalkes, which you must defend and support with square cradles made of sticks, least the winde and the waight of the flowers breake them: these Gilliflowers you may make of any colour you please, in such sort as is shewed you for the colouring of Lillyes, and if you please to haue them of mixt colours you may also, by grafting of contrary colours one into another: and you may with as great ease graft the Gylliflower as any fruit whatsoeuer, by the ioyning of the knots one into another, and then wrapping them about with a little soft sleau'd silke, and couering the place close with soft red Waxe well tempered. And you shall vnderstand that the grafting of Gylliflowers maketh them exceeding great, double, and most orient of colour.

Of grafting of Gylliflowers.

Of the smels of Gylliflowers.

Now if you will haue your Gylliflowers of diuers smels or odours, you may also with great ease, as thus for example: if you will take two or three great cloues, & steepe them foure and twenty houres in Damaske Rose water, then take them out and bruise them, and put them into a fine Cambricke ragge, and so binde them about the heart rote of the Gylliflower, neere to the setting on of the stalke, and so plant it in a fine, soft, and fertile mould, and the

flower

flower which springeth from the same, will haue so delicate a mixt smell of the Cloue and the Rose-water, that it will breede both delight and wonder. If in the same manner you take a sticke of Cinamon, and steepe it in Rose water, and then bruise it, and binde it as afore-said, all the flowers will smell strongly of Cinamon: if you take two graines of fat Muske, and mixe it with two drops of Damaske Rose water, and binde it as afore-said, the flowers will smell strongly of Muske, yet not too hot nor offensiue, by reason of the correction of the Rose water: and in this sort you may doe either with Amber-greece, Storax, Beniamin, or any other sweet drugge whatsoeuer; and if in any of these confections before named, you steepe the seedes of your Gylliflowers foure and twenty houres before you sowe them, they will take the same smels in which you steepe them, onely they will not be so large or double, as those which are replanted or grafted.

Of the Wall-Gylliflower.

Now for your Wall Gylliflower, it delighteth in hard rubbish, limy, and stonie grounds, whence it commeth that they couet most to grow vpon walles, pauements, and such like barraine places. It may be sowen in any moneth or season, for it is a seede of that hardnesse, that it makes no difference betwixt Winter and Sommer, but will flourish in both equally, and beareth his flowers all the yeere, whence it comes that the Husbandman preserues it most in his Bee-garden; for it is wondrous sweet, and affordeth much honey. It would be sowen in very small quantity, for after it haue once taken roote, it will naturally of it selfe ouer-spread much ground, and hardly euer after be rooted out. It is of it selfe of so exceeding a strong and sweet smell, that it cannot be forced to take any other, and therefore is euer preserued in its owne nature.

Of the Helytropian.

The Helytropian or flower of the Sunne, is in nature and colour like our English Marigold, onely it is exceeding huge in compasse, for many of them will be twenty, and foure and twenty inches in compasse, according to the fertilenesse of the soyle in which they grow, and the oft re-

planting of their rootes, they are exceeding goodly to looke on, and pleasant to smell, they open their flowers at the rising of the Sunne, and close them againe at the Sunne setting, it delighteth in any soyle which is fertile either by Art or Nature, and may be sowen in any moneth from Februarie till September, the oft planting and replanting of the roote after it is sprung a handfull from the earth, maketh it grow to the vttermost bignesse, it would haue the East and West open vpon it, onely some small Pent-house to keepe the sharpnesse of the winde from it.

Of the Crown Emperiall.

The Crowne Emperiall, is of all flowers both Forraigne and home-bred, the delicatest and strangest: it hath the true shape of an Emperiall Crowne, and will be of diuers colours, according to the Art of the Gardner. In the middest of the flower you shall see a round Pearle stand, in proportion, colour, and orientnesse, like a true naturall Pearle, onely it is of a soft liquid substance: This Pearle if you shake the flower neuer so violently will not fall off, neither if you let it continue neuer so long, will it either encrease or diminish in the bignesse, but remayneth all one: yet if with your finger you take and wipe it away, in lesse then an houre after you shall haue another arise in the same place, and of the same bignesse. This Pearle if you taste it vpon your tongue, is pleasant and sweet like honey: this flower when the Sunne ariseth, you shall see it looke directly to the East, with the stalke bent lowe thereunto, and as the Sunne ariseth higher and higher, so the flower will likewise ascend, and when the Sunne is come into the Meridian or none poynt, which is directly ouer it, then will it stand vpright vpon the stalke, and looke directly vpward, and as the Sunne declineth, so will it likewise decline, and at the Sunne setting looke directly to the West only. The seedes of this flower are very tender, and therefore would be carefully sowen in a very rich and fertile earth well broken and manured. The seasons

most

moſt méete for the ſame, is the latter end of March, Aprill, or May, for the flowers flouriſh moſt in May, June, and July. As ſoone as it is ſprung a handfull aboue the earth; you ſhall remoue it into a freſh mould, and that will make it flouriſh the brauer: the roote of this flower is like an Apple, or great flat Onion, and therefore in the replanting of it, you muſt be carefull to make a hole large and fitte for the ſame, and to fire the mould gently and cloſe about the ſame. In the Winter it ſhrinketh into the earth, and is hardly or not at all diſcerned, by meanes whereof I haue ſéene diuers ſuppoſing it to be dead, to digge vp the earth, and negligently ſpoyle the roote, but be not you of that opinion, and in the Spring you ſhall ſée it ariſe and flouriſh brauely.

The Dulippo is but a little ſhort of the Crowne Emperiall in pleaſantneſſe and rarenеſſe, for you may haue them of all colours whatſoeuer, in ſuch ſort as was ſhewed you for the Lillyes, Gylliflowers, and other rootes: they are tender at their firſt ſpringing from the ſéede, and therefore muſt be ſowen in a fine rich mould, in the warmth of the Sunne, either in March, Aprill, or May: but after they are once ſprung aboue the ground, they are reaſonable hard, and will defend themſelues againſt moſt weathers: the roote of this flower is ſhaped like a Peare, with the biggeſt end downeward, and many ſmall thréeds at the bottome; therefore you muſt be ſure when you remoue or replant it, to couer all the roote in freſh mould, and let not any part of the white thereof be vncouered: this flower by monethly replanting, you may haue to flouriſh in all the Summer moneths of the yeare, for in the dead of Winter it ſhrinketh into the ground, and is hardly or not at all perceiued, the ſtalkes of theſe flowers are weake, therefore to ſupport them, and defend them from the ſhakings of the windes with

Of the Dulippo.

little

little square frames of sticks, will be very good and necessary, it must be oft watred.

Of the Hyacinth.

The Hyacinth is a flower more delicate to the eye then nose, and is of a good strong nature, for it will endure any reasonable earth, and may be sowne in any moneth of the Spring, from the beginning of Februarie till midde June: it onely hateth tempests and stormes, and therefore is commonly sowen or planted neere vnto walls or other shelter. You may haue them of any colour you please, as is shewed before of other flowers, and in this alteration or mixture of colours their greatest glorie appeareth, they will flourish all the Summer long, and if they stand warme, appeare very early in the Spring.

Of the Narcissus.

The Narcissus is a very curious and dainty flower, and through his much variety and alteration in growing, they are supposed to be of diuers kindes, but it is not so; for in as much as they are seene to be of diuers colours, that is but the Art of the Gardner, as is before exprest in other flowers, and whereas some of them grow single, some double, and some double vpon double, you shall vnderstand that such as grow single, grow simply from the seede onely, those which are double and no more, are such as haue beene planted and replanted, the small threeds of the rootes being clipt away, and nothing left about it that is superfluous, and those which are double vpon double, are the double plants grafted one into another. This Narcissus loueth a rich warme soyle, the mould being easie and light, it may be sowne in any moneth of the Spring, and will flourish all the Summer after. Before it appeare aboue ground it would be oft watred, but after it skils not how little, for it will defend it selfe sufficiently.

Of the Daffadill, Colombine, and Chesbole.

Not vnlike vnto this is your Daffadill of all kindes and colours, and in the same earths and seasons delighteth either to be sowen or planted, and will in the same manner as your Narcissus double and redouble his leaues; so will your Colombine, your Chesbole, and almost any hollow flower whatsoeuer. Many other forraigne flowers there

are

are which grow plentifully in our Kingdome: but the order of their planting and sowing differeth nothing from these which I haue already declared, being the most tender and curious of all other, therefore I will end this Chapter with this one caution onely, that when you shall receiue any seede from any forraine Nation, you shall learne as neere as you can the nature of the soyle from whence it commeth, as hot, moyst, colde, or dry it is, and then comparing it with ours, sowe it as neere as you can in the earth, and in the seasons that are neerest to the soyle from whence it came, as thus for example: if it came from a clime much hotter then ours, then shall you sowe it in sandie mould or other mould made warme by strength of meanure, in the warmest time of the day, and in those moneths of the Spring, which are warmest, as Aprill or May, you shall let it haue the Sunne freely all the day and at night, with Mats, Penthouse, or other defence shield it from sharpe windes, frosts, or colde dewes.

An excellent Caution.

I haue seene diuers Noblemen and Gentlemen, which haue beene very curious in these dainty flowers, which haue made large frames of wood with boards of twenty inches deepe, standing vpon little round wheeles of wood, which being made square or round according to the Masters fancie, they haue filled with choyse earth, such as is most proper to the flower they would haue grow, and then in them sowe their seedes, or fire their Plants in such sort, as hath beene before described, and so placing them in such open places of the Garden, where they may haue the strength and violence of the Sunnes heate all the day, and the comfort of such moderate showers, as fall without violence or extraordinarie beating, and at night draw them by mans strength into some low vaulted gallery ioyning vpon the Garden, where they may stand warme and safe from stormes, windes, frosts, dewes, blastings, and other mischiefes which euer happen in the Sunnes absence, and in this manner you may not onely haue all manner of dainty outlandish flowers, but also all sorts of

A new manner of planting flowers and fruits.

the most delicatest fruits that may be, as the Orenge, Limond, Pomgranate, Poncythron, Cynamon-tree, Oliue, Almond, or any other, from what clime so euer it be deriued, obseruing onely but to make your frames of wood, which containes your earth, but deeper and larger, according to the fruit you plant in it, and that your Alleys through which you drawe your Trées when you house them be smooth and leuell, least being rough and vneuen, you iogge and shake the rootes with the waight of the Trées, which is dangerous. And least any man may imagine this but an imaginary supposition, I can assure him that within seauen miles of London, the experiment is to be seene, where all these fruits and flowers with a world of others grow in two Gardens most abundantly. Now for such flowers or fruits as shall be brought from a colder or more barraine ground then our owne, there needeth not much curiosity in the plantation of them, because a better euer bringeth forth a better encrease, onely I would wish you to obserue, to giue all such fruits or flowers the vttermost liberty of the weather, & rather to adde coolenes by shaddow, then encrease any warmth by reflection, as also to augment showers by artificiall watrings, rather then to let the roote dry for want of continuall moysture; many other notes and obseruations there are, which to discouer, would aske a volume larger then I intend, and yet not be more in true substance, then this which is already writ, if the Reader haue but so much mother-wit, as by comparing things together, to drawe the vses from the true reasons, and to shunne contrary by contraries, which what Husbandman is so simple, but he can easily performe, and hauing the true grounds of experience, frame his descant according to his owne fancie, which is a Musicke best pleasing to all men, since it is not in any one mans power to giue a generall contentment. And thus much for flowers, and their generall and particular ordering.

CHAP.

Chap. VII.

How to preserue all manner of seedes, hearbs, flowers, and fruits, from all manner of noysome and pestilent things which deuoure and hurt them.

IT is not enough to bequeath and giue your sæedes vnto the ground, and then immediatly to expect (without any further industrie) the fruit of your labours, no gœdnesse seldome commeth with such ease: you must therefore know that when you lay your sœdes in the ground, they are like so many gœd men amongst a worId of wicked ones, and as it were inuironed and begirt with maine Armies of enemies, from which if your care and diligence doe not defend them the most, if not all, will doubtlesse perish, and of these enemies the worst and most violentest is Thunder and Lightning, which in a moment killeth all sorts of flowers, plants, and trées, euen in the height and pride of their flourishing, which to preuent, it hath bœne the practise of all the auncient Gardners, to plant against the walles of their Gardens, or in the middest of their quarters, where their choysest flowers grow, the Lawrell or Bay Trée, which is euer helde a defence against those strikings. Of Thunder and Lightning.

Nert vnto Thunder and Lightning are Caterpillers, which are a kinde of filthy little wormes, which lye in Cobwebs about the leaues, deuouring them, and poysoning the sap, in such sort, that the Plant dieth spœdily after: the way to kill these, is to take strong Vrine and Ashes mixt together, and with it to dash and sprinkle all the Plants cleane ouer, and it will both preuent their brœding, or being bred will kill them: the smoake of Brimstone will doe the like, yet if they be exœeding much abundant, the surest way to destroy them, is to take olde, rotten, Of Caterpillers.

mouldy Hay, and setting it on fire, with the blaze thereof burne the Cob-webs, and then with the smoake smother and kill the wormes, and they will hardly euer breede in that place againe.

Of Toades and Frogges.

Next these are Toades and Frogges, which are very poysonous and great destroyers of young Plants, chiefly in their first appearing aboue the ground, and the auncient Gardners haue vsed to destroy them by burning the fat of a Stagge in some part of the Garden beds, from which earth all creatures that haue poyson in them, will flye with all violence: other Gardners will watch where the Kite pearcheth on nights, and gathering vp her dung, scatter it vpon the beds either simply, or mixt with the shauings of an olde Harts horne, and no venemous thing will come neere it.

Of the field Myce.

Next these are field Myce, which will rote seedes out of the earth, and deuoure them aboundantly, which to kill you shall take Henbane seede, and beate it to pouder, and then mixing it with sweet Oyle, fresh Butter, or Grease, make thereof a bayte; and when you finde where they scratch or rote, lay some part of the bayte in that place, and they will greedily eate it, and it will kill them: there be other Gardners which will take a Weesell, and burning it to ashes, scatter the ashes on the beds, and then no field Mouse will come neere them.

Of Flyes.

Next these are Flyes, as flesh-Flyes, Scarabs, Hornets, Dores, and such like, which are great destroyers of Seeds and Plants, when they appeare in their first leafe, and are soft and tender, which to destroy, you shall either take Orpment mixt with milke, or the pouder of Allome, or the ashes of any of these Flyes burnt, and with it sprinkle your beds and young plants all ouer, and it will keepe Flyes that they will not dare to come neere them.

Of the greene Fly.

If the greene Fly, which of all other Flyes is most greedie to hurt Seedes and Plants, doe offend your Garden, you shall take Henbane leaues, Houseleeke, and Mints, and beat them in a Morter, then straine forth the iuyce,

and

and then adde thereto as much Vinegar as was of all the reſt, and therewith ſprinkle your beds all ouer, and the greene Fly will neuer come neere them. Some hold opinion, that if you plant the hearbe Rocket in your Garden, that it is a ſafe preſeruatiue againſt theſe greene Flyes, for it is moſt certaine that the very ſmell thereof will kill theſe, and moſt ſorts of all other Flyes whatſoeuer, as hath beene found by approued experience, and the ſpits of olde auncient Abby Gardens, which a man ſhall ſeldome finde without this hearbe planted in them.

Next theſe are Gnats, which although it be the ſmalleſt of all Flyes, yet it is the greateſt, quickeſt, and ſharpeſt deuourer of tender Plants of all other, for it biteth deeper and more venemouſly ſharpe, then thoſe which are of much bigger ſubſtance: the beſt way to deſtroy them is morning and euening, to ſmoake and perfume your beds either with wet Roſemary, or with mouldy Hay: ſome vſe to burne Calamint, and ſome Ore dung, and ſure all are very good, for the ſmoakes are very ſharpe, and ſtyfle as ſoone as it is receiued. Of Gnats.

Next theſe are Piſmyers, which alſo are very noyſome vnto Gardens, for they will digge vp, and carrie away the ſmaller ſeedes to their hills, and in ſhort ſpace ſpoyle and deface a bed of his encreaſe, and the beſt way to deſtroy them, is, if you finde their hill, to poure hot ſcalding water vpon them: or if vpon your Garden beds you ſtrowe Aſhes or Lyme, but eſpecially that which is made of chalk, they will by no meanes come neere them, as you ſhall finde by experience. Of Piſmyers.

Next theſe are Moales, which digging and vndermining the earth, turneth vp Seedes and Plants in a confuſed faſhion, to the vtter deſtruction and ruine of the Husband-mans labour, the cure whereof is to take them in ſuch ſort, as ſhall be ſhewed in this Booke, where I ſpeake of Paſture grounds; but if you finde that their encreaſe and continuance multiply with your labour, it ſhall be then good for you to plant in diuers places of your Garden Of Moales.

the hearbe called Palma christi, in other places Garlicke, and in other places Onyons, and it is an assured rule that no Moale will come nére where they grow for the strength and violence of their smell, is poysonous and deadly to those blinde vermines.

Of Snailes. Next these are Snailes of both kindes, blacke and white, which are as much offensiue to Gardens, as any other crawling thing, for they féed of the tender leaues of plants, and of the outmost rindes of the daintiest hearbs or flowers, the way to destroy them, is to sprinkle vpon the beds and other places of their aboad good store of chimney sote, which by no meanes they can endure, because it is mortall and poysonous.

Of Moathes. Next these are Moathes or Moaghts, which are very pernitious in a Garden, for they destroy both Séeds and Plants, and there is no better or more certaine way to kill them, then by taking olde horse hoofes, and burning them, with the smoake thereof to perfume all the places where they abide, and it will in an instant kill them; with this smoake onely you may kéepe Arras hanging, Tapistrie, Néedle-worke, Cushions, or Carpets, or any woollen cloath or garment whatsoeuer safe from Moathes as long as you please, neither néede you to vse it aboue once or twice a yéere at the most, as shall be more at large in another place declared.

Of Cankers. Next these are Cankers, which are a kinde of filthie wormes, which deuoure both the great and small leaues of all sorts of swéet Plants, especially Lettuce, Cabbadge, Colaflours, and such like; and the way to destroy them, is to scatter amongst your Plants, Gose-dung, or to sprinkle the iuyce thereof with a wisp of Rue, or hearbe of Grace ouer all the beds, and though some with a rustie knife vse to scrape them from the leaues, and so kill them on a Tyle-shread, yet for my part I hold this the nérer way, and both more certaine and more easie, as experience will approue.

Lastly, are your Garden Wormes which liuing in the hollow-

hollowes of the earth feede much vpon your tender Garden seedes, and the soft sprouts which first issue from them, especially from all sorts of kirnels, in which they delight more then in any other seede whatsoever, as you may finde by experience, if you please to obserue accidents as they happen, without which obseruation you shall hardly attaine to the perfection of an excellent Gardner: for if you please to make this triall, take the kirnels of a faire sound Pippin, and deuide them into two parts, then sowe the one halfe in a Garden bed well dresst and trimmed for the purpose, where the worme hath liberty to come and goe at his pleasure, sowe the other halfe in some riuen boule, earthen pot, or halfe Tub, made for the purpose with the same earth or mould that the bed is, and then set the vessell so as no worme may come thereunto, and you shall finde that all those Seedes will sprout and come forth, when hardly any one of those in the bed of earth will or can prosper, there being no other reason but the extreame greedinesse of the deuouring worme, which to preuent, you shall take Oxe dung, and burne it to ashes, then mixe them with the earth wherewith you couer your Seedes, and it will both kill the wormes, and make the Seedes sprout both sooner and safer. And thus much for the preseruation of Seeds and Plants, from all noysome and pestilent creatures, which being practised with care and diligence, will giue vnto euery honest minde the satisfaction he desireth.

Of Garden Wormes.

An excellent experiment.

Now to conclude this small tract or Treatise of the Husbandmans Kitchen Garden, I would haue euery honest Reader vnderstand, that I haue not taken vpon me to modell out any curious shape or proportion, but onely figured out a perfect nourserie, shewing you how to breed and bring vp all things fit for health or recreation, which being once brought to mature and ripe age, you may dispose into those proper places which may become their worthinesse, in which worke I would haue your owne fancy your owne

The conclusion of the Kitchen Garden.

directour, for I may giue preheminence to that you least like, and disestéeme that most which to you may séeme most worthy, therefore let your owne iudgement order your Garden, like your house, and your hearbs like your furniture, placing the best in the best places, & such as are most conspicuous, and the rest according to their dignities in more inferiour roomes, remembring that your galleries, great chambers, and lodgings of state doe deserue Arras, your Hall Wainscote, and your meanest offices some Boscadge, or cleanly painting: from this alligorie if you can draw any wit, you may finde without my further instruction how to frame Gardens of all sorts to your owne contentment.

THE

THE SECOND PART OF THE SECOND BOOKE

of the *English Husbandman*: Contayning the ordering of all sorts of VVoods, and the breeding of Cattell.

CHAP. I.

Of the beginning of Woods, first sowing, and necessarie vse.

IT is a Maxime held in Plantations, that no land is habitable, which hath not Wood & Water, they two being as it were the only nerues & strength of a mans safe and wholesome liuing, and I haue heard many wise Gentlemen, exercised, and ingaged, in the most noble and euer laudable workes of our new Plantations, both of Virginia and the Summer-Ilands affirme, that they had rather, for a generall profit, haue a fertile wholesome land, with much wood, then (wanting wood) with a Mine of gold: so infinite great is the vse of Timber (whose particulars I need not rehearse) and so insufferable is the want, when we are any way pinched with the same. And hence it springeth that our olde auncestors (whose vertues would God we would in some small mea-

Wood better then Gold.

sure imitate) when they found any hard and barraine earth, such as was vnapt for graſſe, or at leaſt such as bare but graſſe that would keepe life, not comfort life, they presently plowed it vp, and sowed thereon Acornes, Ashkeyes, Maple knots, Beech apples, Hawes, Slowes, Nuts, Bullis, and all other seeds of trees in innumerable quantity, as may appeare by the Forrests of Del la mere, Sherwood, Kings wood, and many other within this kingdome of huge great spaciousnes and compaſſe, from whom when the wood is spoiled, the soyle serueth to little or no purpose, except it be the keeping aliue of a few poore sheepe, which yeeld but little profit more then their carkaſſe. Thus euen from the first age of the world hath our forefathers beene euer most carefull to preserue and encreaſe wood, and for mine owne part I haue euer obserued in all those places where I haue seene Woods decayed and destroyed, that the charge of stubbing and other neceſſaries allowed; those lands haue neuer againe yeelded the former profit, for the greateſt exhauſtment that euer I saw of wood ground was to bring it to tenne shillings an Acre when it was conuerted to paſture, and being kept to wood, it was worth euery seauentéenth yeere one and twenty pound. A simple Auditor may caſt the account of this profit, but such is our grædineſſe, that for our instant vse we little respect the good of ours, or our neighbours: But it is no part of my Bookes method to call offences to queſtion, but onely to right the Husbandman in his tourney to ordinarie profit. Know then that there is nothing more profitable to the Husbandman, then the encreasing and nourishing of wood; from whence (as our common lawes termes it) spring these three bootes or neceſſary commodities, to wit Houſe-boote, Plowe-boote, and Fire-boote, without the first we haue neither health, couert, eaſe, nor safety from sauage beasts: without the second we cannot haue the fruits of the earth, nor ſuſtenance for our bodies, nor without the laſt can we defend off the sharp Winters, or maintaine life againſt the numbing colds which would

The excellent vſes of Wood.

confound

confound vs. The consideration of these three things only, might enduce vs to the preseruation of this most excellent commodity: but the other infinite necessities & vses which we make of wood, as shipping, by which we make our selues Lords of the Seas: fencing which is the bond of concord amongst neighbours: solution & trial of Mines, from whence springs both our glory in peace, and our strength in warre, with a world of others sutable vnto them, should be motiues vnresistable to make vs with all diligence hast to the most praise-worthy labour of planting wood, in euery place and corner, where it may any way conueniently be receiued.

The plantation of Wood.

If then the Husbandman shall liue in a high barraine Countrey (for low-valleyes, marshes, or such grounds as are subiect to inundations, seldome nourish wood well) or in a soyle though not vtterly barraine, yet of so hard and sower encrease, that the hearbage doth in the profit but in small quantity, I would wish him after a generall triall of his earth, to deuide it into three equall parts, the first and the fruitfullest I would haue him preserue for pasture for his Cattell of all kindes: the second and next in fertility for corne, being no more then those cattell may till, and the last & most barraine to imploy for wood: which though he stay long for the profit, yet will pay the interest double. And this ground thus chosen for wood, I would haue him plowe vp from the swarth about the latter end of Februarie, and if it be light earth, as either sand, grauell, or a mirt hazel earth, then immediatly to sow it with Acornes, Ash-keyes, Elme & Maple knots, Beech-apples, Chesnuts, Ceruisses, Crabs, Peares, Nuts of all kindes, Hawes, Hips, Bullice, Slowes, and all manner of other wood seeds whatsoeuer, and as sone as they are sowne with strong Ore harrowes of iron, to harrow and breake the earth, in such sort, that they may be close and safely couered. And in the plowing of this earth, you must diligently obserue to turne vp your furrowes as deepe as is possible, that the seede taking strong and deepe roots, may the better

and with more safety encrease, and defend it selfe against stormes and tempests, whereas if the roote be but weakely fixed, the smallest blasts will shake the Trées, and make them crooked, wrythen, and for small vse but fire onely.

The fencing of young woods.

After you haue harrowed your earth, and laide your séede safe, you shall fence your ground about with a strong and large fence, as hedge, ditch, pale, or such like, which may keepe out all manner of foure-footed beasts, for comming within the same, for the space of tenne yéeres after: for you shall vnderstand, that if any cattell shall come where young wood is péeping aboue the earth, or whilst it is young, tender, and soft, they will naturally crop and brouse vpon the same, and then be sure that the wood which is so bitten, will neuer prosper or spring vp to any height, but turne to bushie shrubs and ill-fauoured tufts, pestring the ground without any hope of profit, whereas if it be defended and kept safe the space of tenne yéeres at the least, it will after defend it selfe, and prosper in despight of any iniurie: and then after that date you may safely turne your cattell into the same, and let them graze at pleasure, and surely you shall finde it a great releefe for your young beast, as your yearling Haiffers, Bullocks, Colts, Fillies, and such like: for I would not wish you to let any elder cattell come within the same, because the grasse though it be long, yet it is sower and scowring, and by that meanes will make your cattell for labour weake and vnhealthie, whether it be Dre or Horse, and for milch-Kine, it will instantly dry vp their milke, but for idle yeilding beasts, whose profit is comming after, it will serue sufficiently.

When cattell may graze in Springs.

The vse of the clay ground for Wood.

Now if the earth whereon you sowe your wood, be a stiffe clay ground, and onely barraine through the extreamitie of colde, wet, or such like, as is séene in daily experience: you shall then plowe vp the ground at the end of Ianuarie in déepe furrowes, as is before rehearsed; and then let it rest till it haue receiued two or three good Frosts, then after those Frosts some wet, as either snow or raine,

and

and then the next faire season after sowe it, as afore-said, and harrow it, and you shall see the mould breake and couer most kindely, which without this baite, and order, it would not doe, then fence it as afore-said, and preserue it from cattell for tenne yeeres after.

And here is to be noted that one Oake growing vpon a clay ground, is worth any fiue which growes vpon the sand, for it is more hard, more tough, and of much longer indurance, not so apt to teare, ryue, or consume, either with Lyme, Rubbish, or any casuall moysture, whence it comes that euer your Ship-wrights or Mill-wrights desire the clay Oake for their vse, and the Joyner the sand Oake for smoothnesse and waynscote. And thus much for the sowing of Wood, and his generall vses. A speciall note.

CHAP. II.

The deuision of vnder-Woods, their sale, and profit.

WHosoeuer be a Lord or Master of much vnderwood, which is indeede young spring-wood of all kindes, growing thicke and close together, either from the seede, as is declared in the former Chapter, or from the rootes of former falles, the first being a profit begotten by him selfe, the other a right left by purchase or inheritance, and desire, as it is the dutie of euery vertuous husband, to make his best and most lawfullest profit thereof, hauing not left vnto him any president of former commodity. In this case you shall survay the whole circuit of your wood, with euery corner and angle there vnto belonging, and then as your abilitie and the quantity of your ground shall afford, you shall deuide your whole wood either into twelue, seauentéene, or one and twenty parts of equall Acres, Rodes, or Rods, and euery yeare you shall sell or take to your owne vse one of The deuision of Woods.

those parts, so that one following yearely after another, our sales may continue time out of minde, and you shall imploy as you please so much wood euery yeare of either twelue, seauenténe, or one and twenty yeares growth. And in this you shal note that the sale of one and twenty, doth farre excéede that of seauenténe, and that of seauenténe as farre that of twelue: but in this it is quantity, and your necessity that must direct you, and not my demonstration: for there be fewe Husbands but know that an Acre of one and twenty yéeres growth, may be worth twenty, nay thirty pounds, that of seauentéene worth eight or ten pounds, and that of twelue, fiue and fiue pounds, according to the goodnesse of the wood, insomuch that the longer a man is able to stay, the greater sure is his profit: but fewell and fence must of necessity be had, and if a man haue but twelue acres of wood, I sée not but he must be forced to take euery yéere one acre for his owne reliefe, and if hée take more, hée must either necessarily spoyle all, or driue himselfe into extreame want in fewe yeares following: and therefore it is méete that euery good husband shape his garment according to his cloath, and onely take plenty where plenty is; yet with this husbandly caution that euer the elder your sale is, the richer it is, as you may perceiue by the well husbanded Woods of many Bishopricks in this land, which are not cut but at thirtie yeares growth.

The valew of vnder-wood.

Of the sale of vnder-woods.

When you haue made your deuisions according to your quantity, you shall begin your sale at an out-side where cariages may enter without impeachment to the springs you intend not to cut, and a pole or halfe pole according to the quantity of ground, you shall preserue (being next of all to the outmost fence) to repaire the ring fences of your Wood, and to seperate the new sale from the standing Wood: and this amongst Woodwards is called Plash-pole. Then at the latter end of Ianuarie you may begin to cut downe your vnder-wood, and sell it either by acres, rodes, perches, poles, rodds, or dozens, according

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ding to the quantitie of your earth, or the abilitie of your buyers. And in this sale I cannot set you downe any certaine price, because true iudgement, and the goodnesse of your wood must onely giue you direction, things being euer valewed according to their worth and substance, and this sale or the cutting downe of vnder-wood, you may continue from the latter end of Januarie, till midde Aprill, at which time the leafe begins to bud forth, or somewhat longer if necessitie vrge you: the like you may also doe from the beginning of September, at which time the leafe beginnes to shed till the middest of November.

How to cut vnder woods.

Now for the manner of cutting downe your vnderwoods, although the lawes of the Kingdome shew you what dutie you shall performe therein, what Timber you shall preserue, and how neere each Weauer shall stand one to another, yet I would wish you both for your owne and the Common-wealths sake, to performe somewhat more then that to which you are by law compelled, & therefore you shall giue direction to your wood-fallers, that when they shall meete with any faire and straight well growne sapling, Oake, Elme, Ash, or such like, to preserue them, and let them stand still, being of such fit distance one from another, that they may not hinder or trouble each other in their growing, and when you shall finde vpon a clutter many faire Plants or Saplings; you shall view which is the fairest of them all, and it preserue onely, and the rest cut away, that it may prosper the better: also if you finde any faire and well growne fruit Trees, as Peares, Chesnuts, Seruisses, and such like, you shall let them stand and cleare them from the droppings of the taller trees, and you shall finde the profit make you recompence. Now for the generall cutting vp of the wood, you shall cut it about fiue inches aboue the ground, and drawing your strokes vpward, cut the wood slope-wise, for that is best to hasten on the new Spring; and those Weauers or young which you preserue and suffer to growe still, you shall prune

and:

and trimme as you passe by them, cutting away all superfluous branches, twigges, and young spyers, which shall grow either neere vnto the roote, or vpon any part of the boale, which is fit to be preserued for Timber, and if you shall finde that the earth haue by any casualty forsaken the rot, and left it bare, which is hurtfull to the growth of the Tree, you shall lay fresh earth vnto it, and ram the same hard and fast about it.

The fencing of falles.

Thus when you haue made an end of cutting downe your sale, and that the wood is cleansed and carried away, and all the lose and scattered sticks raked vp into seuerall heapes, and caried away also; for it is the part of euerie good husband and Woodward, not to see any wood lye and rot vpon the ground: you shall then with the vnderwood preserued in the Plash-pole, deuide by a strong hedge this new cut downe sale from the other elder growne wood, and for tenne yeeres, as before is spoken, not suffer any foure-footed beast to come within the same; from which rule you shall learne this lesson, that it is the Woodwards duty euery day to loke ouer all his young Springs, and if by any mischance or negligence cattell shall happen to breake into them (as many times they doe) then shall he not onely driue forth or impound such Cattell, but also survay how farre and which Plants they haue cropt, and hauing spied them, with his wood Bill, presently cut the Plants so browzed close by the bottomes of the last shuts, and then they will newly put forth againe, as well as if they had neuer beene hindred: which done, he shall finde out where the cattell brake in, and then mend the same, so well and sufficiently, that it may preuent the like mischiefe. Also if these young springs shall stand neere vnto Forrests or elder Woods, which are full of wilde Deare, and be no purlewes belonging vnto the same, the Woodward then shall neuer walke without a little dogge following him, with which he shall chase such Deare out of his young springs, because it is to be vnderstood, that the browzing of Deare is as hurtfull to young wood, as that of

The Woodwards duty.

any

any other cattell whatsoeuer. And thus much touching the ordering and gouernment of vnder-woods, with their sales, and the nourishing vp of greater Timber.

Chap. III.

Of High-Woods, and their Plantation.

What high Woods are.

High Woods are those which containe onely Trees for Timber, and are not pestred or imbraced with the vnder growth of small brush wood, such as Hazels, White-horne, Sallowes and Poplar are; these for the most part consist of Oakes, Ash, Elme, Beech, Maple, and such like, growing so remote and seperate one from another, that although their tops and branches meete, and as it were infolde one within another, yet at the rootes a man may walke or ride about them without trouble. These high Woods had their first beginnings from the seede, as was before declared, and nourisht from age to age amongst the vnder-woods, which, when men began to want foode for their breede-Cattell, and that from the super-abundance of young Woods, they found some might conuenientlie be spared, they forth-with in stead of cutting downe their young wood aboue the earth, began to digge it vp by the rootes, and with stubbe Ares to teare the meane sinewes from the ground, so that it might not renew or encrease againe, and then leuelling the earth, and laying it smoth and plaine, to leaue nothing standing but the tall Timber-trees, betweene which the grasse had more libertie to growe, and Cattell more abundance to feede on, and all be not so long and well able to fill the mouth, as that which growes in the thicke springs, yet much more sweet and better able to nourish any thing that shall graze vpon the same, by reason that the Sunne and Frosts hauing more free power to enter into the ground, the earth is so much

The beginning of high Woods.

the better seasoned, and bringeth forth her encrease with more sweetnesse.

The Plantation of high Woods.

Some are of opinion, that these high Woods may as well be planted as sowne, and that many of them from the first beginning haue béene so, to which opinion I consent in part: for doubtlesse I am perswaded, that many small Groues of Ash, Elme, Beech and Poplar haue béene planted, for we sée in our daily experience, and the new walkes in More-fields by London, are a perfect testimonie, that such Plantations may be without trouble or danger: but for the Oake to be taken vp and replanted, is very hard, and very seldome in vse, neither shall a man in an whole Age sée any Oake remoued come to perfection or goodnesse, but growe crooked, knottie, and at the best, but for the vse of fewell onely: but for the other before rehearsed, you may remoue them when they are a dozen yeares of age, and plant them where you please: and if the earth haue in it any goodnesse at all, they will take root and grow both spéedily, and plentifully. And since I am thus farre entred into the plantation of Woods, I will shew you how you shall plant and remoue euery Trée in his due manner and season.

Of Planting the Elme.

And first for the planting of the Elme, which is an excellent Trée for shadow, and the adorning of walkes or dwelling houses, you shall make choise of those Plants which are straightest, soundest, the barke euen and vntwound, and at least eighteene or twenty inches in compasse: these you shall digge out of the ground, roote and all, then at the top of the head, about three fingers vnder the knot, where the maine armes seuerally issue forth, you shall a little slope-wise cut the head cleane off them, and mixing clay and a little horse-dung, or fine ashes together, couer the head round about there-with, then ouer the same wrap Wolle, or fine Hay, and binde it about with soft clouen Oziers, or some such like bands, then with a sharpe pruning Bill cut euery seuerall branch of the roote within a finger or two of the stocke: which done, and the roote

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pickt cleane, you shall make a hole to be digged in the place, where you meane to plant the Elme iust of that depth, the hole was from whence you digged out the Elme, that so much and no more of the Elme may be hidden in the earth, then was formerly at his remouing; and this hole you shall make spacious and easie, and that the mould be soft and lose both vnderneath and round about the rote of the Elme, which done, you shall place your Elme in the same, straight and vpright, without either swaruing one way or other, which for your better certaintie, you may proue either with plumbe, leuell, or other instrument, which being perfected, you shall with rich fresh mould well mixt with olde meanure, couer and ram the same fast in the earth, in such sort, that no reasonable strength may moue or shake it: and all this worke must be done in the encrease of the Moone, either in the moneth of October, or at the latter end of January: but the latter end of Januarie is euer held the best and safest, for there is no question but you shall see flourishing Trees the next Summer after: and in this sort you may likewise remoue either Beech, Witcher, or Popler, bestowing them either in Groues, Walkes, Hedge-rowes, or other places of shadow, as shall seeme best to your contentment: for their natures being alike, their growthes and flourishings haue little difference.

Of Planting the Ash.

Now for the replanting or remouing the Ash, though not much, yet there is some difference, for it is not at the first so speedie a putter forth, and flourisher, as the others be: but for the first yeare laboureth more to bestow and fixe his rote in the earth, then to spread forth his vpper branches, and although some Woodwards are of opinion, that so much as the Ash is aboue the ground, so much hee will be vnder before he begin to flourish outwardly, yet experience doth find it erronious, for though it be for the first yeere a little slower then other Trees, yet when it beginneth to flourish, it will ouer-take the speediest grower. Therefore when you do intend to plant Ashes for a speedy

profit, you shall not according to the olde custome chuse the smoth, small, long Plants, which are hardly three inches in compasse, and haue put out hardly any branches, and are such as growe from the rootes of elder Ashes cut downe before, which our auncient Woodwards haue vsed to slip or cleaue from those roots, no, these are the worst sorts of Plants: but you shall take the true ground-Ash, which springeth from his owne proper roote, being smoth, euen, sound, and straight without bruise, canker, or other impediment. This you shall digge vp by the root, being as is before said almost twenty inches in compasse, and hauing cleansed the roote, you shall leaue each spray not aboue halfe a foote, or eight inches in length: but for the small threeds or tassels of the roote, those you shall cut cleane away close by the wood, and so plant it in euery point, as was shewed you for the planting of the Eline, onely the top thereof you shall by no meanes cut off, because it is a tree of pith, which to deuide or lay bare, were very dangerous; and the best season for the planting of this Tree, is euer in the encrease of the Moone, at the fall of the leafe, which is from the beginning of October till midde November, and at no other time, for it would euer haue a whole Winter to fasten his roote, and to gather strength, that it may bud forth his leafe the Summer following. Thus you see how you may plant Groues or Copses at your pleasure, and make vnto your selfe high Woods according to your owne pleasure. But you will obiect vnto me, that you liue in such a champaine Countrey, that albe these Plantations might breede vnto you infinite pleasure, yet the pouerty thereof in wood is such, that these Plants are not there to be found for any money. To which I thus answere, That in this Kingdome there is not any Country so barraine, or farre off remote from wood, being a soyle fit to receiue wood: But his next neighbour-Country is able to furnish him, especially with these Plants at an easie reckoning: as for example, I hold Northampton shire one of the barrennest for Wood, yet best

Obiection.

Answere.

best able to beare wood, and hath not he his neighbour Huntingeon shire and Leicester shire about him, where nurceries of these Plants are bred and preserued for the sale onely: Nay, euen in Holland, in Lincolne shire, which is the lowest of all Countries, and most vnlikely to holde such a commodity, I haue seene as goodly Timber as in any Forrest or Chase of this Kingdome: and thus much for the planting of high Woods.

CHAP. IIII.

Of the preseruation, and sale of high Woods.

IT is not sufficient for the Husbandman to sowe, plant, and encrease wood about his grounds, conuerting his earth to the vttermost and extreamest profit that may spring from the same: but he must also be diligent to preserue and nourish his timber trées from all inconueniences that may any way annoy or afflict them: and to this end hée shall daily walke into his Woods, and with a searching eye surueay euery Trée which is of any account, and sée if he can finde any fault or annoyance about the same, and if casting his eye vp to the top, where the maine armes shoote forth themselues, he perceiue that by the breaking off of some arme or other riuen boughes, the wet and droppings of the leaues is sunke and fretted into the Timber, which in time will corrupt the heart, and make the Trée hollow. In this case he shall presently mount the Trée, and with his Bill, either cut the place so smooth that the wet may not rest thereon, or else hauing smoothed it so much as he may with conuenience, mixe stiffe clay and fine hay together, and with the same couer the place, in such manner, that it may put off the wet till it haue recouered new barke.

Of Trees which take wet inwardly.

If hée shall perceiue any of his younger Trées to be

Of Barke-bound.

Barke-bound, that is, so stiffe and straitly tied within their owne rynde, that they cannot encrease or prosper: in this case he shall with a sharpe drawing knife, made in the proportion of a narrow C draw and open the barke euen from the top of the bole of the Tree downe to the rote, and then clap Dre-dung into those slits, let the Tree rest, and in short space you shall see it mightily encrease.

Of Hornets and Dores.

If he shall perceiue that Hornets, Dores, or such like, haue found some little hollownesse in one of his Trees, and seeketh there to shelter and hide themselues, which in little space they will soone make larger, he shall forth-with besmeare all the place with Tarre and Cowe-dung, and it will driue them thence.

Of the Canker.

If he shall finde that by the droppings of other Trees, some of his Trees shall grow cankerous, and lose their barke, which is an accident very vsuall, and the Trees whose barkes are so lost, will with great difficulty after prosper. In this case he shall annoynt the place with Tarre and Oyle mixt together, and then couer the place with clay where the barke is wanting.

Of Pismyers.

If he shall perceiue any Pismyer hilles or beds to be made against any of his Trees, which is very noysome, for they are great destroyers of the barks of Trees: he shall then with hot scalding water kill them, and throw the hill downe leuell and plaine with the earth.

Of Iuy, Woodbine, and Misseltoe.

If he shall finde any Iuy, Woodbine, or Mysseltoe to grow in or about any of his principall Trees, which doe strangle, suffocate, and keepe them from encreasing, he shall forth-with digge vp the rots thereof, and then cut it away or losen it from about the barks of the Trees.

Of Thunder and Lightning.

Lastly, if he shall perceiue that by Thunder, Lightning, or other plantarie stroakes, any of the armes of his well growne Trees be blasted or staine, he shall forth-with cut them away, euen close to the quicke Wood, and make the place smoth and euen where they were ioyned: thus shall the carefull Husbandman with a vigilant eye, regard euery enormous and hurtfull thing that may of-

fend

send his Timber, and by that meanes possesse more benefit from a fewe Rodes, then others doe from many Acres.

Now when either necessity or the vrgent occasions of any needfull vse, enforceth the Husbandman to make sale of any part of his tall Wood, in which Marchandise there is many prety and obscure secrets, such as are hard to be shewed by any Verball demonstration, for truly there is not any trucking or marting whatsoeuer, in which a man may soner deceiue, or be deceiued, men buying and selling in a manner hood-winkt: for it is most certaine that no man can certainely tell either what peny-worth hee selleth, or the other buyeth, so long as the Tree is standing, there be in Trees so many secret faults, and likewise when they are downe, and come to the breaking or burkning (as the Wood-man tearmes it) so many vnexpected vertues, as for mine owne part I haue often seene a Tree whose out-side hath promised all good hope, the barke being smooth and euen, the body large and great, and the armes high set on, and spaciously extended; yet when this Tree hath beene felled, and came to burkning, there hath beene found a hole in the top, which hath runne cleane through the heart, and vtterly spoyled the whole Timber: so likewise on the contrary part I haue seene a Tree very foule at the top, which is suspitious for rottennesse, whose armes haue growne so close and narrow together, that they haue promised little burthen, yet being cut downe, I haue seene that Tree passing sound, the armes double the loades in valuation, and the price being lesse then any, the proofe and goodnesse to excede all, so that I must conclude it all together impossible to set downe any fixed or certaine rules either for the buyer or seller: but for as much as there are diuers worthie obseruances for both parts, and that it is as necessary to buy well as sell well, I will runne through euery particular obseruation, which doth belong both to the one and the other partie, with which when a mans minde is perfectly acquainted,

Of the sale of tall Woods.

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he may with much bolder confidence aduenture to buy or sell in the open Market.

How to chuse Timbers.

The first thing therefore that either buyer or seller should be skilfull in, is the choyse of all sorts of Timbers, and to know which is fit for euery seuerall purpose, the crooked and vneuely being for some vses of much higher price and reckoning then that which is plaine, straight, and euen growne, as thus for example. If you would buy Timber for Mill-wheeles, the heads of round Turrets, or any kinde of any worke whatsoeuer, you shall chuse that which is crooked and some-what bent, being sound, firme, and vnshaken. If you will chuse Timber for Summer Trees, Baulks, Jawmes, or Tracens, you shall chuse that which is most hartie, sound, and much twound, or as it were wrythen about, which you shall with great ease perceiue by the twinding or crooked going about of the barke, the graine whereof will as it were circle and lap round about the Tree. This Timber which is thus twound or wrythen, will by no meanes ryue or cleaue asunder, and therefore is esteemed the best to support and beare burthen, and the heart thereof will endure and last the longest.

Of Mill Timber.

Timber to beare burthen.

Timber for Pales, Wainscote, &c.

If you will chuse Timber for Pales, Single, Coopers-ware, Wainscote, or such like, then you shall euer chuse that which is smoth, euen, and straight growne, without any manner of twynding or shaking, which you shall perceiue by the straight and euen growing vp of the barke, whose crests will ascend straight and vpright, euen from the roote to the bottome, which is an assured token that all such Timber will shiuer and ryue into as thinne parts as a man would desire.

Timber for Pyles or Water-workes.

Lastly, if you would chuse Timber to make Pyles of, to driue into the earth, for the framing of Weares within the water, the heads of Ponds, or any other worke within the water, then you shall chuse that which is most knottie (so it be sound) for that will driue without splitting, and continue in the earth the longest: and of all Timbers

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the Elme is accounted the best for this purpose, for it will continue almost euerlastingly in the earth without rotting; yet notwithstanding, the Oake is excellent good also: and thus much for the generall choise of Oakes.

Now if you would chuse Timber for weather-boards, or to be vsed in water-workes, or to make Planks for low moyst Vaults, then you shall chuse the biggest, soundest and smoothest growne Elme, it is also excellent good to make Kitchen tables of, or for boards for the vse of Butchers. If you will chuse the most principallest Timber, for Cart or Waine Axel-trées, for the naues of wheeles, or for any other vse of toughnesse, you shall chuse the Elme onely, for it excéedeth all other Timbers, and though some Husbandmen are of opinion, that the Elme Axel-trée when it is throughly heated, is then most apt to breake, they are much deceiued, for it will endure farre beyond Ash or any other Timber, except Yewgh, which for the scarsity is now of little vse in such a purpose. And herein you must obserue, that the Elme which you chuse for Axel-trées must be straite, smoth, and without knots, but that which you chuse for naues, must be most knotty, twound, and the hardest to be broken or hewed asunder. Vse of the Elme.

If you will chuse Timber for Ploughes, ordinary Axel-trées (for those of Elme are speciall) the rings of wheeles harrow bulls, and such like, then you shall chuse the fairest, straightest, biggest, and smoothest growne Ash that you can finde, and from the roote end vpward, you shall cut out a length of Axel-trées, aboue it a length of shelbordes, and aboue it (if the Trée be so large) a length for heads and Sheathes, the largest armes which are somewhat bending, you shall elect for rings for wheeles, and so according to the bignesse of the Ash, and as your eye can proportion out what will be made of the same, you shall make valuation thereof. Vse of the Ash.

If you would chuse Timber for ioyned Tables, Cupbords, or Bedsteds, you shall then make choise of the fairest Walnut-trée you can finde, being olde, straight, vn- Vse of the Wall-nut tree.

knotted, and of a high boale: and although either Oake, or Ash will reasonably well serue for this purpose, yet the Walnut-tree is by many degrees the best of all other, for it is of smoothest graine, and to the eye most beautifull: prouided that by no meanes you put it into any worke, before it be exceedingly well seasoned.

Vse of the Peare-trees.

If you would chuse Timber for Joynt-stooles, Chaires, or Chests, you shall then chuse the oldest Peare-tree so it be sound, for it is both smoth, sweet, and delicate, and though it be a very soft Wood, yet in any of these frames it is an exceeding long laster, and the heart thereof will neuer breede worme, nor will it in any time lose the colour.

Vse of the Maple, Beech, and Poplar.

If you would chuse Timber for Trenchers, Dishes, or any Tourners ware, or for any inlaying worke, you shall then make choise of the fairest and soundest Maple, being smoth and vnknotted, for it is the plainest graine, and the whitest Wood of all other: and although either the Beech or Poplar will reasonably well serue for these purposes, yet is neither the colours so good, nor the Timber so long lasting. Many other Trees there are which may serue for many other purposes: but these are of most vse for our English Husbandman, and will sufficiently serue to passe through all his businesses.

Of Char-coale.

Touching Char-coale, you shall vnderstand, that Oake, Elme, and Ash, make your longest and best enduring Coale: the Birtch the finest and brightest Coale, and the Beech or Sallow the swiftest Coale. Now for your small Coale, the twigges of the Birtch makes that which kindles the soonest, and the White-thorne that which endures the longest.

How to value Timber.

Thus when you know how to chuse euery seuerall Tree, and the true vse and profit which can any way be made of the same, and by a practised experience can cast by the surnay and view of a standing Wood, the almost entire profit that may arise from the same, deuiding in your memory how many are for euery seuerall purpose, and to

what

what reckoning they may amount one with the other, and blemishing (if you buy) the good with the bad, or making good (if you sell) the bad with those good ones which grow neere them, you may then boldly venture into any sale either as buyer or seller at your pleasure, and sure if you know (as it is fit you should doe) the Market-able prices of all sorts of Timbers in those places, where you are either to buy or sell, as what a Mill-post is worth, what so many inches of well squared Timber, containing so many foote in length, what a dozen of boards of such a size, what so many naues, spoakes, rings, sparres, or tracens, or what so much sound and good Plough-timber is worth, and then loking vpon a Tree, and computing what may euery way be made of the same, allowing the waste which will hardly sometimes defray the charge of breaking vp the Tree, you cannot but with great ease draw into your minde the true value of euery Tree, and the vttermost profit or losse may any way rise from the same.

How to measure Timber by geese.

And in this worke I would haue you to obserue this rule very carefully, that is, when you come to any great Timber-tree, to fathome or embrace it about with both your armes, and then knowing what quantity your fathome is, and how many fathome girdleth the Tree round about, you may from former experience giue a certaine geese what inches of squared Timber that Tree will beare, for if you haue found in former trials that twice your fathome in the rough barke hath borne twenty, or two and twenty inches squared, and now finde that the present Tree on which you loke, is no lesse, but rather with the bigger, you may boldly presume, that being sound, this tree can carrie no lesse square of good Timber: and thus much for the knowledge and choise of tall Woods.

Best seasons for the sale.

Now to come to the seasons & fittest times for sale of these high Woods: you shall vnderstand that it is meete for euery good husband which intendeth to sell any of his high Woods, to walke into the same immediately after Christmas, & whether they be in woods, Groues, hedge-rowes, or

other places, to marke with a speciall marke all those Trées which he intendeth to sell, as well for the weeding and cleansing out of all such as are decayed and wasted, as also to know the true number of both the good and bad, and thereby in some measure to compute the profit which will arise from the same, for to make sale of them otherwise confusedly, might bring much losse to a man happily, selling away those that would encrease their values, and keeping them which daily would decrease their goodnesse, or so disorderly dismiring his Wood, that where one faire and good Trée would draw a mans eye from beholding diuers which are doated, now that onely taken away, the rest will remaine, and neuer be sale-able, and therefore euer as neere as you can so suite and match your Trées together, that in your sales you may neuer passe away an absolute worthie Trée, but you may euer couple some which haue defects to goe with it, as in these dayes we see Marriners and Poulters sell Rabbets, a fat and a leane euer coupled together. When you haue thus marked out what you meane to sell, and disposed your sale according to your best profit, after notice giuen vnto the Country in the Market Townes neere adioyning, you shall begin your sale the Candlemasse following, which sale you may continue all the Spring, according to the greatnesse thereof, or the quicknesse of buyers. Now for any rules or orders to be obserued in these sales, I can prescribe you none certaine, because it is meete that euery one binde himselfe to the customes of the Country in which he liueth, whose variations are diuers, for almost euery one is seuerall, onely in the maine they holde together, which is that they seldome make publike sales for money downe vpon the head, but for a certaine payment some fewe moneths after, which makes the Marchandise more sought to, and the sales goe away the faster: and in this the Sales-man must be circumspect in the choise of his Chap-men, and where hee findeth any doubt there to make one neighbour stand bound for another: as for the earnest penny it is euer ouer

The time for Chap-men.

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and aboue the price, and must be laide downe at the binding vp of the bargaine, which earnest is in some Countries foure pence in the pound, in some eight pence, and in some twelue pence, according to the goodnesse of the Timber, and hath euer beene taken for a fée due to the Sales-man for his paines and attendance, and sure if he be carefully honest, it is a merrit well bestowed: if otherwise, it is much too much for falshood, for in him consists the owners losse or profit, and therefore it may become any man, of what place so euer, to take a strickt account from such an officer: or if he haue any doubt, euer to ioyne with him in commission, another of contrary faction.

When you haue made sale of your Timber, you shall by no meanes let it be cut downe till the end of Aprill, at which time the sap ascending vpward, will lowsen the bark, and make it come from the body of the Trée easily. You shall cut your Timber downe close by the earth, not digge it vp by the rootes, vnlesse you meane vtterly to destroy it, for from the spurnes of the roote will arise new Spiers, which in processe of time, will come to another Trée. As soone as you haue felled your Oakes, you shall with your Axe immediatly whilst the sap is wet, take all the barke from the body and the armes, and setting it end-wayes vp one by another, so place it, that the winde may passe through it, and dry it, and then sell it to the Tanners, which will giue you a good price therefore, according to the worth and scarsity thereof. When your Trées are barkt, you shall then sawe the body into such lengthes of Timber, as shall be méete for the purpose for which it is bought, or in such sort as it may be best portable: the armes also you shall hewe from the body, and so burken or breake them vp, as they may be fit to be loaded: all which done, and the Timber caried away, you shall if you intend to haue the Wood renew, fence in the sale, and kéepe it safe from Cattell: and thus much for the preseruation and sale of high Woods.

When to cut downe Timber.

Chap. V.

Of the breeding of Wood in rich champaine soyles.

NAture which is the most perfect worke-mistresse of all things (as all the Philosophers say) but I say our good God out of his most diuine wisedome, hath allotted to euery soyle, if we will note it, through the whole course of this Kingdome, particular profit to sustaine and maintaine it, as to some Mines, to some Timber, and to some fertility of grasse and corne, and where any one of these are, there commonly some of the other is euer wanting, as we see daily in our experience; and for as much as in the fruitfull and fertill soyles of this land, of which wee esteeme the wealthie vales, as that of Essam, White-horse, Belvoire, and many others the best, there is euer great scarsitie of Wood, the very wealthinesse of the soyle it selfe almost denying to beare such burden, because for the most part the stiffnesse of those clayes is contrary to their growth, yet for as much as the necessitie and vse of Wood is so great and valuable, I would perswade euery good and worthy Husbandman, to endeauour himselfe with all his vtmost power and strength, to plant wood in euery conuenient place round about him, and not to take the rules of the ignorant for his lesson, that sith neuer any did grow there, therefore neuer any will grow there: for it is absurd and foolish: nor to say because my auncestors haue neuer done it why should I attempt it: These arguments are made from a false figure, and the Husbandman must remember that his dutie is industrie, and encrease not altogether imitation and president, and he must as seriously finde out new and nearer profits, as hold those he hath learned: and therefore he shall endeauour by all commendable labour to haue euer about him whatsoeuer is necessarie for his vse: but you will

will peraduenture aunſwere me, that to plant Woods in theſe rich ſoyles, were very much loſſe, becauſe the fertilitie thereof will yéeld a much better profit. To this I reply, that I would not haue you plant any ſpacious piece of ground with wood, but onely your ditches, hedges, and ſuch waſt earthes, as almoſt denie any other profit, and that the want of wood in thoſe places may not diſcourage you, to imagine that wood will not grow there. Doe but view the cytes of euery Towne in thoſe rich Countries, the ſeates of Noblemen & Gentlemens houſes, and the Parks which commonly are adioyning there-vnto, and you ſhall hardly ſée any of them without the fellowſhip & acquaintance of ſome wood, which in times paſt hath bæne planted either for defence or pleaſure, and from thence collect that if wood will grow with my next neighbour, then why not with me, ſo long as the ſoyle doth not alter? But Labor vincit omnia improbus, True induſtrie was neuer fruitleſſe. Then for the generall good both of your ſelfe & your neighbours, loke that you repleniſh all your ditches & ring fences, with good ſtore of Quick-ſet, that is to ſay, all that lye high, & out of the danger of water, with White-thorne, Black-thorne, and Bryer, and thoſe which are low & ſubiect to waſhing, with Willowes, Sallowes, and Oyers.

How to ſet all ſorts of Quick-ſet.

Now for as much as it is not enough to ſay vnto the Huſbandman do this, but that I muſt alſo ſhew the manner of doing thereof: I will ſhew you briefly how to ſet all manner of Quick-ſets, and firſt for the white-thorne, black-thorne, bryer or ſuch like, which muſt ſtand free from inundation, you ſhal when you encloſe any piece of ground, after you haue markt out the true breadth of your dyke vpon the in-ſide thereof, and cloſe by the verdge of the dyke, cut with your ſpade a little trough, halfe a foote or there-abouts in breadth & depth, in which trough or ſmall gutter, you ſhall lay the rootes of the firſt rowe of your Quick-ſets, ſo as the top ends may loke vpward, & a little bend in towards the ditch, & theſe quick-ſets you ſhall place within leſſe then a foot one of another: then with your ſpade

beginning

beginning to make your ditch, you shall with the first cleane mould, couer all the rootes close and fast, so as they will not shake nor stirre with your hand, then hauing raised the banke of your Dyke, and couered the lowest rowe of Quick-set more then halfe a foote, and broken the earth so, as it may lye close and handsome together: you shall then after the same manner lay another rowe of Quick-set ouer the first, I meane not one Quick-set directly ouer another, but the second rowe placed as it were in the midst betweene two of the first, though at least halfe a foote higher: then you shall couer that rowe like the former, and ouer it place a third, which shall stand directly opposite, and ouer the first, so that in their growth the middle rowe shall as it were grow betweene two of the lowest, and two of the highest: and then vpon this vppermost rowe lay the remainder of your earth, and make your barke perfect, and in this sort finishing one yard of the Ditch after another, you shall at length bring your labour to the end of your desire. Now in this labour you are to obserue some speciall things, as first to loke well vpon your Sets before you put them into the ground, and be sure that they be greene, young, and vntainted, then that the rootes be cleane, and no small threeds or tagges hanging about them. And lastly, that they stand vpright, and not aboue foure or fiue inches without the earth at the most, then shall you loke well to the making of your banke, and lay the earth so as it may not slip or fall backe into the Dyke, so as the raine may not wash away the mould, and leaue the rootes bare: but let all things be done strongly and artificially. The best seasons for this worke is the moneths of Februarie, March, and Aprill, or September, October, and some part of November: if the weather be dry aboue head. When you haue set your Quick-set, you shal make a dead hedge vpon the top of the new banke, to keepe those Cattell which are within your ground from breaking forth or hurting the Quick-set: and another small fence on the lowe verdge of the Dyke which is outward, to

keepe

kéepe those cattell which graze without from running into the dyke, and hurting the quick-set. Now after a spring and fall is past, you shall survay all your quick-set and wéede it cleane from all manner of filthinesse that doth choake or stifle it, and scratching the fresh mould about it giue comfort to the roote: then if you perceiue that any of your Sets be dead, you shall plucke them vp, and place new in the roome, and if any be blasted in part, and not cleane killed, you shall cut away so much as is blasted, and let the rest remaine, you shall loke well to the Caterpiller and other wormes, which mightily deuoure Quicksets, especially in these fat Countries, and if you finde any taint of them, destroy them as is shewed you in a former Chapter.

Planting of greater Trees.

After your Quick-set is come to the age of three yéeres, and that the banke is setled and swarth growne thereon, you shall then within the body of your hedges plant all manner of great Trées, as Ash, Béech, Maple, and such like, and also all manner of fruit Trées, as Apples, Peares, Plums, Wardens, and such like, and in the first three yéeres be very carefull to preserue each in his true proper nature, and doe to them all the rights which is due to their growth, and in that time obserue which kinde of Trées in the generality prospereth best, and agréeth most naturally with the soyle. And of those Trées sée that you flourish your grounds most plentifully, the particular manner of planting whereof is already formerly declared. And hence doth Kent and Worcester shire boast of their fruit, Windsor, Sherwood, and Hollam shire their Oakes, and other particular Countries their particular commodities.

Of the setting of Willowes, &c.

Now for the setting of Willow, Sallow, and Oziers, it is a thing so vsuall and common, that it néedeth no great Art in the relation, yet because I would be loath that any omission should be taken for negligence, you shall vnderstand that in setting them you must first respect the place, which would euer be lowe and moyst, the water sometimes washing them, sometimes cooling them, and euer

giuing them comfort. Now to speake first of the Willow, it would be euer planted vpon bankes, where it may stand more dry then wet, for such prosper best, and endure longest, as for proofe some will continue, twelue, fiftéene, nay one and twentie yéeres, where as those which are set close by the water, will hardly endure seauen, but not aboue nine yéeres at the most. Touching their planting, they be set two manner of wayes, but which is the best, is not yet agréed on amongst Husbandmen. The first is to take an Augure full as large in compasse (though much shorter) as that where-with you boare Pumps, and with it boare a hole in the earth two foote, and a halfe déepe, then hauing headed some of the choysest Willowes you haue, take the fairest and straightest of those lops, and then cutting them sloape-wise at both ends, and leauing no superfluous twigs cleauing there-vnto, put the bigger end downe very hard into the earth, and then with the mould which came forth, with the Augure ram the earth close and hard about the Set, so as no reasonable strength may shake it. Now there be other Husbandmen which in stéed of the Augure take onely an Oaken or Ash stake, of the bignesse of an vsuall set, and with a Beetell driue it into the ground two foote and a halfe, and then by shaking and opening the earth, pull it out againe: then put in the Set as is before shewed, and beate and tread the earth close there-vnto, and there is no doubt of the well prospering thereof. Now for the defects which Husbandmen finde in these two seuerall plantings. Some say, that the Augure taketh out so much earth, that the Set cannot but stand lose at the roote, and so wanting full hold of the earth, either takes not at all, or continues but a little space. Others say that the driuing in of the stake beates the earth so hard together, that it withstandeth the passage of the tender sprouts, & so killeth the set, but both are deceiued: for these are but suppositions, and experience daily shewes vs, that these are the best and spéediest waies of setting of all sorts of Willowes that euer any

time

time brought forth, and I haue knowne one man set this way two hundreth Sets in a day, of which not one hath failed, but all prospered. Now for your Sallowes, you shall set them, and chuse the Sets in all poynts as you doe the Willow, onely they would be placed a little nearer the water, for they delight somewhat more in moysture, as for the Dzier it would be set like other Quick-set in the side of bankes, so as it may almost touch the water, and as your Willowes or Sallowes would be set a little remote one from another, as namely tenne foote asunder: so these must be set close together, and in thicke rowes one against another: and these Dzier Plants you must cut from their head, being the principall spiers which grow thereon, and then cut off their tops, leauing them not aboue two foote long at the most, and of all other they are the quickest in growing.

The vse of Willowes, Sallowes, and Oziers.

And although Willow, Sallow, and Dzyer, are in our lawes esteemed but as weedes and no Woods, yet they be so profitable, that the Husbandman can hardly misse them, the Willow and Sallow serving for fence and fewell, to make Harrowes, Cart-saddles, & horse Yames, and the Dzyers, for fish Leapes, or Weeles, for Baskets, Scuttels, Fans to winnow with, and many other things full as necessary: therefore if you haue any marish grounds that are bleleese, bogge-myers, or Ilands in great riuers, let them be imployed to the nourishing of these profitable weedes, and by making draynes through them to giue the water passage, you shall in small time bring them to earthes of great profit, which consideration were it rightly wayed, there would not be halfe so much waste ground as is in this Kingdome.

Ordering of the Willow.

But to my purpose, when you haue planted these Willowes, you shall after euery floud, see if the water haue driuen any of them awry, or displease them, and immediately mend them, and set them vp straight againe. If any Cattell shall pyll or barke them, you shall pull vp such Settes, and place new in their rowme.

your Willow set would by no meanes be too long at the first setting, for then it will neuer beare a good head, and too short is likewise as vnprofitable, therefore it is held to be fiue foote aboue the earth, is a length sufficient: you may head your Willowes once in three yeeres, or fiue at the furthest, and when you see the bodies ware hollow, you may cut them downe for the fire, and fire new Sets in their places.

Ordering of Ozier.

The Ozier to come to his true profit and season, asketh much pruning and trimming, as namely you must keepe the stocke lowe, and neuer aboue halfe a foote aboue the earth, you must picke them cleane from Mosse, and from the slime and filth, which the ouer-flow of the water will leaue vpon them: you shall prune the small spiers, and make them grow single one by another, and if any shoote out a double stalke, you shall cut it away, you may head them euery second yeere at the fall onely, and though some head them once a yeere, yet it is not so good husbandry, nor will the Ozier be so tough or long lasting. The best seasons for the setting of the Willow, Sallow, or Ozier is, either any part of the Spring or Fall, and the best time to loppe the Willow or Sallow, is in the Spring for fence, and in the Fall for timber or fewell: but the Ozier would be cut at the fall of the leafe onely. And thus much for the breeding of Wood in the rich champaine Countries.

CHAP. VI.

Of Plashing of Hedges, and Lopping of Timber.

HAuing alreadie sufficiently in the former Chapter spoken of the planting of all sorts of quicksets, it is meete now that I shew you how to order the hedges being growne and come to perfection.

perfection. Know then that if after your hedge is come to fiue or seauen yeares of age, you shall let it grow on without cutting or pruning, that then although it grow thicke at the top, yet it will decay and grow so thinne at the bottome, that not onely beasts but men may runne through it, and in the end it will dye and come to nothing, which to preuent, it shall be good once in seauen or eight yeares to plash and lay all your Quick-set hedges, in which there is much fine Art and cunning to be vsed. For this plashing is a halfe cutting or deuiding of the quicke growth, almost to the outward barke, and then laying it orderly in a sloape manner, as you see a cunning hedger lay a dead hedge, and then with the smaller and more pliant branches, to wreathe and binde in the tops, making a fence as strong as a wall, for the rote which is more then halfe cut in sunder, putting forth new branches, which runne and entangle themselues amongst the olde stockes, doe so thicken and fortifie the hedge, that it is against the force of beasts impregnable. What plashing is.

Now to giue you some light how you shall plash a hedge, though diuers Countries differ diuerslie in these workes, yet as neere as I can I will shew you that which of the best Husbandmen is the best esteemed. First, for the time of yeere either February or October, is passing good, and the encrease of the Mone would likewise be obserued. How to plash: The time of yeare.

For the toles which you shall imploy, they would be a very sharpe nimble Hatchet, a good Bill, and a fine pruning knife. Now for the worke you shall enter into it, first with your Bill you shall cut away all the superfluous boughes and branches which are of no vse, or hinder your worke, and then finding the principall stemmes which issue from the maine rote, you shall within a foote or lesse of the ground with your Hatchet, cut the same more then three quarters through, so as they may hang together by nothing but the outward barke, and some part of the outward sap, and this stroke must euer be sloape-wise and The Tooles.

downeward: then take those mayne bodies of the Quick-set, so cut, and lay them sloape-wise from you, as you would lay a dead hedge, and all the branches which extend from those bodies, and would spread outwardly, you shall likewise cut as before said, and fould them artificially into your head, and euer within a yard or two distance, where a prettie Plant growes straight vp, you shall onely cut off the top equall with the height of your hedge, and so let it stand as a stake, about which you shall folde and twind all your other branches. Now when you come to the top of the hedge, which would commonly not be aboue fiue foote high, you shall take the longest, youngest, and most plyant boughes, and cutting them as afore-said, gently binde in the tops of all the rest, and so make your hedge strong and perfect: and herein is to be noted, that the closer and thicker you lay your hedge (so there be nothing in it superfluous) the stronger and better lasting it will be. Many vse not to binde in the tops of their plasht hedges, but onely to lay the Quick-set and no more: but it is not so husbandly, neither is the hedge of any indurance: many other curiosities there be in the plashing of hedges, but this which I haue alreadie shewed, is sufficient both for the Husbandmans benefit and vnderstanding.

The profit of Plashing.

The profit which ariseth from this labour, is the maintenance and defence of fencing, the preseruing and encrease of Quick-set, and a continuance of amitie amongst neighbours, when one liues free from offending another. It yeelds a good Mast for Swine, and with the ouer-plus thereof at these times of plashings, repaireth all a mans dead hedges, and brings good store of fewell both to the Brewhouse, Kitchin, and Backhouse.

The lopping of Timber.

Next to the plashing, is the lopping of Timber-Trees, which in those Countries which are bare and naked of wood, is of much vse, and though I cannot much commend it, because it oft marreth the bodies of Trees, yet I must allow it for necessary, because it is a needfull rate, which the Trees pay to their Planters.

This

This lopping or heading of Trées, is the cutting off of the armes and uppermoſt branches of Trées, and ſuffering the body to growe ſtill, and it may very well be done once in eight or tenne yéeres, either at the beginning of the Spring, or at the end of the Fall, as you ſhall haue occaſion to uſe the wood, and immediately after the Moone hath new changed. What Lopping is. The ſeaſon for Lopping.

Now for the manner of the worke, there is ſmall curioſitie to be uſed therein, if your Axe be good and ſharpe, for you ſhall but cut off the armes and boughes, ſmooth and cleane without nickes, rifts, or gutters, or any thing which may receiue wet, whereby the Tréé may be cankred and ſpoyled. Alſo in cutting away of the armes, you ſhall haue a great care rather to cut them away (if it be poſſible) vpward then downeward, leaſt when you cut them downeward, the waight of the arme ſodainly falling downe, riue and teare the barke of the body of the Tréé, which is dangerous, and hath béene the ſpoyle of much Timber: which to preuent, you ſhall euer before you ſtrike any blowe aboue, make a good large nicke vnderneath, and then after cut it downe from aboue, and ſo the Tréé ſhall receiue no hurt. Alſo you ſhall obſerue to cut the armes cloſe by the body of the Tréé, and neuer to deſiſt till you haue made the place as playne and ſmooth as may be, for to doe the contrarie, is neyther workmanly, nor the part of any good husband. And thus much touching the plaſhing of Hedges, and lopping of Trées. How you ſhall lop Timber.

CHAP.

CHAP. VII.

Of Pasture grounds, their order, profit, and generall vse.

Diuersities and vse of Pastures

HAuing already sufficiently entreated of errable Grounds, Gardens, Orchards, and Woods of all kindes, I thinke it most meete (as falling in his due place) here to write of Pasture grounds, which are of two kindes: the first, such Pastures as lye in wood land, mountainous, or colde climes, and are enclined to hardnesse and barrennesse, and therefore onely imployed to the breeding and bringing forth of Cattell: the other such as lye in lowe, warme, and fruitfull soyles, and are most fertile and aboundant in encrease, onely imployed to the fatting and feeding of Cattell.

Of barraine Pastures.

And now to speake of the first sort of Pasture, which being some-what barraine, is preserued for breeding, you shall vnderstand that it is generally dispierced ouer all this Kingdome, and particularly into euery Countrey, for according to the deanes and mixture of the earth, such is either the richnesse or pouerty of the same, and of those seuerall mixtures I haue spoken sufficiently before in that part of this Booke, which entreateth of errable ground. Then to proceede to my purpose, it is the first office of the Husbandman when he seeth and knoweth the true nature of his earth, and perceiueth from perfect iudgement that it is of very hard encrease, which as the temper and mixture of the soyle assures him, so also he shall better confirme by these fewe signes and Charracters, which I will deliuer: as first, if he see grasse slow of growth, and that no Spring will appeare before May. If in stead of Clouer grasse, Dandylion, and Honisuckle, you see your ground furnished with Penigrasse, Bents, and Burnet. If you

Signes of barrainnesse.

see

see much Knot-grasse or Speare-grasse, or if you perceiue the scorching of the Sunne burne away the grasse as fast as the raine had brought it forth: or if you finde quarries of stone neere vnto the vpper swarth of grasse; or if your ground bring forth Lyng, Bracken, Gorse, Whynnes, Broome, Bilburie, or Strawburie: or if your ground be morish, full of quick-myers, mossie or full of blacke Flint, any of these signes make it to be most apparant that the soyle is barraine and of hard encrease.

Bettering of soyles.

And then as before I said it is the Husbandmans first office to prouide for the bettering and perfecting of his earth, which he shall doe in this sort. First, if he perceiue that the barrainnesse of his ground proceedes from want of good Plants, as from want of Clouer-grasse, Dandylion, Honisuckle, Cowslop, and other sweet flowers, then he shall repaire into the fruitfull Countries, and there buy the hay seedes and sweepings of hay-barne-flowers, which he shall euery Spring and fall of the leafe sowe, as thin as may be, vpon such Pastures, as he shall either lay for meddow, or preserue for the latter Spring after Michaelmas.

Sowing of good seedes.

But if he respect not the goodnesse of grasse, but the abundance of grasse, as those husbands doe which liue in or about great Cities, then he shall dung those grounds which he will lay for meddow at Candlemasse; or those which he will graze or eate in the first beginning of the Spring, at Michaelmasse before, with the oldest and rottennest meanure he can get, of which the best is the rotten staddell or bottomes of Hay-stackes, or for want of it the meanure of horse-stables, sweepings, and scowrings of yards and barnes, the mudde of olde ditches, or else good Ore or Cow meanure, any of which will bring forth abundance of grasse.

For abundance of grasse.

Yet thus much I must aduertise the Husbandman, that this meanuring of Pasture grounds carries with it diuers imperfections, for though it occasion abundance of grasse to growe, yet the meddow or hay which comes thereof, is so ranke, loggie, and fulsome in tast, that a beast

The imperfection of meanure.

taketh no ioy to eate thereof, more then to holde very life and soule together. Also the grasse thus meanured which you intend to graze or eate with your Cattell, is by meanes of the meanure so lose at the roote, that Cattell as they bite plucke vp both the grasse, roote, and all, which being of strong & ranke sent in the mouth of a beast, maketh him loathe and cast it out againe, and so not striue to eate to be fat, but onely to maintaine life.

To helpe a slow Spring.

Now if your Spring be slow, and late in the yeere before your grasse will appeare aboue ground, it is meete then that you enclose your ground, and not only maintaine the fences with high and thicke Quick-sets, but also with tall Timber-trees, whose shade and strength may defend many colde blasts from the earth, and adde vnto it a more naturall warmenesse then it had before, for it is onely the coldnesse of the soyle which makes the grasse long before it grow. Also in this case it is meete that you lay (as the husbandman tearmes it) all such Pasture as you intend to graze at the spring following, in November before, & so not being bitten from that time till Aprill following, no doubt but your spring will be both good and forward. There be others which helpe their slow springing grounds by stocking them in the latter end of the yeere with great abundance of sheepe, who although they bite neere to the ground, and leaue little grasse behinde them, yet they so tread and meanure it with their hot meanure, that it will spring after it commeth to rest, much more early and faster then it was wont. So that to conclude in a word, to make a barren ground spring earely, is to keepe it warme, let it haue long rest, and meanure it well with Sheepe.

To helpe Knot-grasse and Speare-grasse.

If your ground be troubled with Knot-grasse or Speare-grasse, it is a signe of too much colde moysture in the earth, and in this case you shall with a great common Plough, made for such a purpose, turne vp great furrowes through your ground, and make them so descend and fall one into another, that not onely the moysture bred in the earth, but that which falls vpon the earth, may haue a swift passage from

from the same, and so your soyle being drayned and kept dry, all these weedy kindes of grasse will soone perish.

If your ground be subiect to the scorching or burning of the Sunne, then you shall vnderstand that it is directly contrary to the last soyle we spake of: for as that by too much moysture is made barraine by colde, so this by too much want of moysture is made barraine with heate: wherefore the Husbandman shall in this case draw all his drayns, to bring moysture into his ground, which sometimes watring and sometimes ouer-flowing the same, will in the end bring it to a reasonable fertility, for it is a rule, that where there may be ouerflowes, there can seldome be any hurt by Sunne-burning, vnlesse that such soyles be vpon Limestone ground, or neere vnto other quarries of hard stone, which lying neere vnto the vpper swarth of the grasse, doth so burne the rote, that the vpper branches cannot prosper. In this case the bringing in of water doth rather hurt then good, wherefore your best course is partly by your owne industry, and partly by the labours of others, who are traded in such commodities, to let forth your ground to Stone-diggers or Lime-makers, who digging the quarries out of the earth, and then filling vp the emptie places with rubbish and other earth, the soyle will in short space become as fruitfull as any other, for it is onely the want of taking rote; or the burning vp of the rote, which makes this kinde of earth barraine.

To helpe Sunburning.

To helpe quarries of stone.

Now if your ground bring forth Ling, Braken, Gorse, Whinnes, or such like: you shall pare off the vpper swarth of the earth, and lay it in the Sunne to dry, in the height or heate of Sommer, and being throughly dried, you shall lay them in round hollow heapes one sod ouer another, then putting fire vnto them, burne them into ashes, which done, spread the ashes, like a meanure, ouer all the ground, and you shall see those weedes will no more spring or grow in that ground.

To helpe Ling, Braken, &c.

If your ground be mozish or full of quicke myers,

To helpe moriſhneſſe or quick-myers.

you ſhall then by ſmall draynes or trenches draw away the water, and turne it into ſome lower ditch or current, and ſo bringing the ground to a ſtability or firmeneſſe, there is no doubt but fruitfulneſſe, will preſently follow after.

To helpe moſſineſſe.

Laſtly, if your ground be moſſie, and bring forth in ſtead of graſſe onely a ſoft fuſſie and vnwholſome moſſe, your onely beſt way to cure the fault, is in the Winter time to tread it much with the feete of Cattell, as by making of Hay-ſtacks in diuers parts of ſuch ground, and ſo fodring your Cattell about the ſame, and ſo yearely altering the places of your Stackes or Reekes to goe ouer all your ground, & without doubt the treading of the ground will kill the moſſe, and the meanuring of the Cattell, and the expence of Hay-ſeeds vpon the ground, will ſone bring the earth to much fruitfulneſſe and goodneſſe.

The generall vſe of barraine grounds.

Now for the generall vſe of theſe barraine grounds, it is to be vnderſtood, that albe by the meanes before ſhewed, they may be helpt or bettered, yet they are but onely for breede or encreaſe of Cattell. Whether the grounds be ſeuerall and incloſed, or vniuerſall and common: whether they be Woods, Parkes, or Paſtures, or Heathes, Mores, Downes, or other wilde and vnlimitted places, and theſe grounds ſhall be deuided into three parts, the firſt and moſt fruitfulleſt lying loweſt, lying neereſt to the riuer or ſome running ſtreame, you ſhall preſerue for meddow, and not ſuffer any beaſt to bite vpon the ſame from Candlemaſſe, vntill the hay be taken from the ground. The ſecond part, you ſhall graze or eate from Candlemaſſe till Lammas, which would be that which lieth moſt plaine and bleake, and moſt ſubiect to all weathers. And the third part, which is the warmeſt and ſafeſt, you ſhall graze from all-Hollantide till Candlemaſſe, and betwixt Lammas and all-Hollantide you ſhall eate vp your eddiſh or after-crop of your meddowes.

What Cattell are to be bred.

Now whereas I ſpeake generally, that theſe barraine grounds are for the breede of Cattell, yet you ſhall vnder-

ſtand

ſtand me particularly, as namely, what Cattell for what ſoyle, for euery barraine earth will not bring forth Cattell alike, as ſome will beare a faire Cowe or Ore, yet but a little Horſe: and ſome will bring forth a very goodly Horſe, yet but a very little horned beaſt, therefore you ſhall obſerue that if your ground lye any thing lowe, or be ſubiect to much moyſture, and ſo not extreamely barraine, but although the Spring be late, yet after it ſpringeth, it yéeldeth a reaſonable bit, this ground is fitteſt to bréede Cattell vpon, as Cowe, Ore, and ſuch like: but if it lye high and dry, if it be ſtonie or mountainous, haue much reflection of the Sunne: or though it be ſomewhat more barraine then the former earth, and in the beſt part of the Spring yéeld but a ſhort, yet ſwéet bit, this ground is fitteſt to bréede a faire and large horſe vpon: but if it be extreamely barraine colde and moyſt, ſtonie or moſſie, ſo it be replenished with any good ſtore of Underwood, then it is fit to bréede ſmall hard Nags vpon, or Geldings of a meaner ſize, Goates, wilde-Swine, or ſuch like. And laſtly, if it be extreame barraine, colde, and dry, and altogether without any kinde of ſhelter, but ſubiect to euery blaſt whatſoeuer, this ground is fit onely to bréede Shéepe vpon, as we ſée by daily experience in the ſeuerall parts of this Kingdome: ſo that to conclude, you ſhall beare in your memorie, that where you bréede your beaſt, would be reaſonable bit: where you bréede your Horſe good ayre and warmth, and where you bréede your Shéepe, there much ſpaciouſneſſe of ground. And thus much briefly for the nature and vſe of your barraine grounds.

Of fertill grounds.

Now to proceéde to your fruitfull and rich grounds, whoſe very encreaſe and abundance of graſſe, without any other curious relation ſhewes their fertility, there is little obſeruation to be held in the ordering & diſpoſing of them, for being naturally good of themſelues, there néedeth little Art to the maintainance of the ſame, onely to haue an eſpeciall care to the fencing and ſafe kéeping of them, to the due time of eating them with your Cattell, and to obſerue

a fit proportion of rest for them, in which they may grow and gather head for the maintainance of such beasts as shall fæde vpon them. And to these, as an especiall rule aboue the rest, must be added a carefull diligence not to ouer-stocke or loade your ground with more Cattell then it may conueniently beare, for if your ground be neuer so fruitfull, if it be ouer-prest with multitudes of Cattell, it cannot by any meanes yéeld you the profit of your expectation, but returne you losse and dammage.

The deuision of rich grounds.

These fruitfull and rich grounds would be deuided into two parts, the one pastures, or grounds for continuall fæding or nourishing of Cattell all the yære, the other meddowes, from whence you shall gather your Winters prouision of Hay, for the preseruation of your Cattell, which are either for labour or sale in the Market, and of these two parts I will speake seuerally.

The generall vse of rich grounds.

Yet before I begin to speake largely of them, it is méete you know the generall vse of these rich and fruitfull grounds, which is indéede the fæding or fatting vp of Cattell, either for foode in your owne house, or for sale in the Market, to the Butcher, Drouer, or men of such like place or profession. For indéede to bréede much vpon these rich grounds, is neither profitable to the Husbandman, nor is the beasts so bred, either so comely or Market-able, as those bred in the harder soyles, as wée may note in our experience, if we will suruay the brédes of Cattell in Gloster-shire, Sommerset-shire, and Lincolnshire, which for the most part are bred vpon exceeding rich and fertile ground: yet if we take view of them, we shall finde that albe they are tall and large, yet they are of slender shape, leane-thighed, crumple-horned, and oft tender and dry skinned, which is a fault very note-worthie amongst Graziers, and indéede are nothing so eyely and Market-able, as those beasts are which are bred in Yorke-shire, Darby-shire, Lancashire, and such like, all which are bred vpon hard and barraine grounds, yet haue goodly, large, and round bodies, close trust, thicke, and well

well coupled together, faire heads, veluet skinnes, and as the Prouerbe is, are so beautifull in horne and haire, that they are euery mans money, in euery Market. So that I conclude, that albe vpon the rich ground you may brede good Cattell, and it is necessary also so to doe for the maintaynance of stocke, yet the generall vse, and that which is the greatest profit to the English husbandman, is to graze and fede the same.

Of Pastures and ordering them.

Now to procede to my former purpose, touching that part of rich ground which I call Pasture, because it is onely for feeding, you shall first prouide that they be very well fenced, according to the nature of the Country, either with ditch, pale, rayle, dead hedge, or quicke-growth: you shall also see that they be well stored with water, that is sweet and wholesome, for putrified water breedeth many mortall and infectious diseases amongst Cattell. These Pastures must euer be your highest ground, and such as lye safest from inundations. Those Pastures which you lay or giue rest to from the beginning of November, you may fede at Candlemasse following with heilding beasts, or such as are but beginning to fede, but with your fat beasts not till our Ladies day after: those Pastures which you lay or giue rest to at Candlemasse, you may very well fede at May following: those which you giue rest to at May-day, you may fede at Midsommer, for then the spring is swift and plentifull: those you lay at Midsommer, you may fede at Lammas, and those you lay at Lammas, you may fede in October, and generally all the Winter following: onely you shall obserue, that those Pastures which lye most in danger of water, or any other casualtie, be first eaten, least by too long delaying an vnseasonable time come, and so you be both preuented of your hope and profit.

Manner of feeding of cattell.

In the eating of your Pasture grounds, are many things to be obserued, as first for the feeding of your fat Cattell, you must by all meanes be sure that they haue full bite, which is to say, length of grasse: for cattell, whose

tongues

tongues are the principall gatherers vp of their foode, neither can nor will bite nere vnto the ground, except it be extreame hunger which compels them, and then they take little ioy in their foode. Next you shall oft (as any fit occasion will giue you leaue) remoue and shift them into fresh grounds, and not expect that they should eate your grasse downe to the bottome, but onely as it were scumme and take the vppermost and choisest part thereof, and so they will fede both swiftly and throughly: and for that grasse which they shall leaue behinde them, you shall eate it vp after them with your labouring or worke-cattell, and lastly with your sheepe. It is very good also amongst your fat beasts euer to haue a leane horse or two: for your fat beasts taketh delight to fede with them, and sometimes to bite after them, there being as it were a kinde of sympathie or liking of each others tastes. After your grasse is fully knit, and hath receiued his whole strength, which wil be at Midsommer, then you may suffer your fat beast to eate a little nerer vnto the ground till after Lammas, because there is an extraordinarie sweetnesse therein, springing from the heate of the Sunnes beames onely. These few obseruations well kept, there is no doubt but your Cattell will fede well to your contentment, then when you see that they are sufficiently fed, according to the ayme of your purpose, whether it be for the vse of your houshold, or the vse of the Market, you shall forth-with imploy them accordingly, for it is both the losse of time and money, not to put them off by sale or otherwise, so soone as they are come to the end of your desire. For these rich grounds will sometimes make two returnes in the yere, sometimes three, which is a great profit. And I haue heard sometimes of foure, but it is very rare, and the Cattell so returned must be very well stricken with flesh before they be put vnto feeding, but if your ground will returne leane beasts fat twice through the yere, it is commodity sufficient.

Now because it is not sufficient to say sell or kill your

Cattell

Cattell when they are fat, except you haue the Art and skill to know the same, you shall obserue these few rules following, and they will sufficiently instruct you in the same. First, when you see your beast in the generall shape and composure of his body shew most faire and beautifull, each member being comely, and each bone couered, in such sort as a perfect shape requireth; as no eye is so stupid as cannot tell when a beast loketh well or ill-fauouredly, you shall then gueste the beast to be well fed, especially when you see his huckle-bones round and not sharpe, his ribs smoth, not rough, his flankes full, his natch thick, and his cod round. This when you shall perceiue, you shall handle him, and griping him vpon the neathermost ribs, if you feele the skinne lose, and the substance soft vnder your hand, you may be well assured that the beast is very well fed outwardly, that is vpon the bones. You shall then lay your hand vpon his round huckle-bones, and if that feele, vnder your hand, soft, round and plumpe, you shall be assured that the beast is well fed both outwardly and inwardly, that is, both in flesh and tallow: then you shall handle him at the setting on of his taile, and if that handle bigge, thicke, full, and soft, it is a true signe that the beast is very well fed outwardly: then handle his natch-bones which are on both sides the setting on of his taile, and if they feele soft and lose, it is a signe that he is well fed, both outwardly and inwardly. Lastly, you shall handle his cod and nauell, if it be of an Ore, and the nauell onely if it be a Cowe, and if they handle thicke, round, soft, great, and plumpe, it is a most assured signe that the beast is very well tallowed within. And thus when any of these parts or members shall handle in contrary manner, you shall iudge of the contrary effects. And thus much touching the knowledge of a fat beast.

How to know a fat Beast.

Now for the second part of these rich grounds, which are meddowes, they ought to be the most fruitfullest and richest of all other, lying low and leuell, and being now and then in the Winter season watht with inundations,

Of Meddowes and their ordering.

yet not too too much drencht or washt with the same: for as the moderate ouerflowing of waters enricheth and fertiles the soyle, so the too much soking or long resting of the water rotteth the earth, & bringeth it to barrainnesse, neither is it altogether necessary that every meddowe should lye so low that it might be ouerflowed, for there be some high grounds which are free from those floods which will beare meddow in very sufficient manner, & although the lower meddowes doe abound in the plenty of grasse, yet the higher grounds euer beareth the sweeter grasse, and it is a rule amongst Husbandmen, that the low meddowes do fill, but the high meddowes do feede, the low are for the Stable, but the high are for the Cratch, and that which is long will maintaine life, but that which is short will breede milke.

Preseruation of Meddowes.

The chiefest respect you shall haue to your meddowes, is to defend and preserue them from Moales, and such like vermine, which rote vp the earth, and destroy the sweet and tender roots of the grasse. Next, that you note in what places of the meddow the water standeth longest, & from thence, by small furrowes or draynes, to giue it a free passage, so that the meddow may as it were cleanse & be dry in one instant. Lastly, you shall maintaine the banks of all such ditches & other fences bordring about your meddowes in good and sufficient manner, both for keeping out of water after your meddowes begin to grow, as also for keeping Cattell from eating them in the night or other times, which is a great deprivation and losse of the profit you expect to come from them: for you shall vnderstand, that if any ouerflow shall come vnto your meddowes after May, it will leaue such a sandy filthinesse in the grasse, that except very moderate showers fall swiftly, and sodainly, to wash it out againe, the Hay which shall be got of that crop, will both be vnsauorie and vnwholsome, and breed in your Cattell many dangerous and mortall sicknesses.

When to lay Meddowes.

The best times for laying of meddowes to rest, is, if the meddow lye high, as in vp-land Countries, or if the soyle

be

be cold, or the ſpringing thereof ſlow, at Candlemaſſe: but if the ground be more warme, temperate, & of ſome more fertility, then you may lay it at our Ladies day in March: but if the ground be moſt fruitfull, then if you lay it at May day, it will be early enough. Alſo in the laying of your meddowes to reſt, you ſhall conſider the ſtate of the ground, as whether it be eaten néere and bare, and with what Cattell, as Horſe, Oxen, or Sheepe: if it haue beene eaten bare with Oxen or Horſe, then you ſhall lay it earlier in the yéere, for it will aſke a longer time to growe againe: but if it haue beene eaten with Sheepe (although they bite néereſt to the ground) yet you may lay it ſo much later, becauſe the meanures which they beſtow vpon ſuch good ground, will quickly haſten on the Spring: but if your meddowes haue not beene eaten bare, but haue a good deepe fogge vpon them ſtill, then you may lay them the lateſt. Alſo in the laying of meddowes, you ſhall conſider whether they be common or priuate, if they be common meddowes, and that no olde cuſtome binde you to the contrary, you ſhall lay them to reſt earely in the yeere, that recouering a forward Spring, you may cut them ſo much the ſooner, and ſo haue the better after-crop, and the longer time to eate it: but if your meddow be priuate, and at your owne particular diſpoſing, then you ſhall lay it according to your owne neceſſitie, and the goodnes of the ſoyle, obſeruing euer to giue it full time of growth, and not to cut it till the graſſe be full ripe, for it is better to let it grow a weeke too long (ſo the weather be ſeaſonable for the withering of it) then to cut it two dayes too ſoone, becauſe when it is too earely cut, it not onely loſeth the ſtrength and goodneſſe, but alſo the ſubſtance and waight, and in the drying ſhrinketh and waſteth to nothing.

When to mow Meddowes.

Touching the fitteſt time to cut or mowe your meddowes: If they be laid in a due ſeaſon, it is held of all the beſt Engliſh husbandmen generally to be a weeke or a fortnight after Midſommer day, as namely about the tranſlation of Thomas, which is euer the ſeauenteenth day of July, and

and without question it is a very good time for all men to begin that labour, if their grounds be fruitfull and of early growth: but in as much as diuers grounds are diuers in their growth, some being much more hastie then other some: and for as much as some meddow may as well grow too long as too little a time, as in high land Countries, where the heate and reflection of the Sunne will burne and consume away the grasse, if it be not gathered in a due season, I would therefore wish euery good Husbandman about a weeke before Midsommer, and a weeke after, to view his meddowes well, and if he see them turne browne, if the Cock-heads turne downeward and stand not vpright, if the Bels and other vessels of seede open and shed their seedes, if your Honisuckles haue lost their flowers, and the Penigrasse be hard, dry, and withered, then you shall truly vnderstand that your meddow is ripe and ready to be mowne, and the longer it standeth, the more it will lose of the substance, and when any of the contrary signes appeare, as when the meddow lookes greene and fresh, the Cock-heads looke vpright, the Bels are close and hard, the Honisuckles flowring and purple, and the Penigrasse soft and moyst, then is your meddow not readie to cut, nor will the Hay that is so gotten be other then soft, fuzzie, and most vnwholsome, no beast taking delight to eate of the same.

The inclination of the weather.

Now to these considerations, you shall adde a carefull obseruation of the state and inclination of the weather, and if you finde that the weather is disposed to much wet or incertaintie, then you shall forbeare to mowe, because that moysture will still maintaine and hold the grasse in his perfect strength so long as it groweth: but if it be once cut downe, then the wet will soone rot and spoile it: but if you finde the weather enclined to drought and fairenesse, then you shall with all speede cut downe your Hay, for one loade got and brought into the barne without raine, is worth two that hath beene washt, though but with the smallest shower. There be some Husbandmen that in

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the mowing of their meddowes, will obserue the state of the Mone, and other planetarie coniectures, but they are fitter for those which seeke curiositie more then profit, for mine owne part I would wish euery good husband but to know truly when his crop is ripe, and then to gather it in the most constant and faireſt seasons, which the rules already set downe will most amply shew him.

The manner how to mowe Meddowes.

Now for the manner of mowing your meddowes, although the generall act resteth in the hands of the mower, and that it is hard and impossible, in words, to expresse the Art of the action, nor is it needfull that euery Husbandman be a mower, yet for those rules which the English Husbandman should know and obserue, I will in no sort omit them. You shall then know that in the mowing of your meddowes you shall mowe them smoth, plaine, and leuell, and as the Husbandman tearmes it, with such an euen board, that a man may no more but discerne the going in and comming forth of the Sythe: and this shall be done so close and neere vnto the ground, as is possible for the worke-man to get, especially if it be in publique and common meddowes, because the swap and first crop is all the maine profit you can challenge your owne: nay, you shall doe it also in your owne priuate and seuerall meddowes: for although an ignorant custome haue drawne some of our Husbandmen, to say and beleeue that there is no losse in the sleight and insufficient mowing of priuate meddowes, because say they, what I lose in the Barne, my Cattell finde on the ground, yet they are much deceiued in that opinion, for what they so leaue on the ground halfe cut halfe vncut, is no good foode, neither pleasant nor sauourie, but dry, hard, and bitter, and indeede no better then sower fogge, which may fill, but cannot nourish, and who then will be so simple, as not to preferre sweet Hay before such vnsauourie grasse? therefore be carefull to mowe your grasse euen, and close by the ground, for it will make the fresh grasse spring vp with

with more ease, and be much pleasanter in taste.

How to make Hay.

Next after the mowing of your meddowes, followeth the making of your Hay, which is a labour that must be followed with great care and diligence, for it is an old saying, that dearth beginneth at the Hay-barne doze, and he that is negligent in that, can hardly be good husband in any thing else, then to shew you how you shall make your hay, you shall first understand that no one particular forme can stand for a generall rule, because Hay must be made according to the nature of the grasse, and the soyle where it groweth, some being apt to wither and make soone, as that grasse which is finest, and hath in it least weedes, others will be long in making, as that which is full of thicke, strong, and sower grasse, many weedes, bunnes, and such like hard stalkes, which are not easily dried, therefore it is the part of euery good Husbandman, either by his eye and knowledge to iudge of the nature of his grasse, or else to follow the customes of the Country and soyle wherein he liueth, but the first, knowledge, is the better Science. But to proceede to my purpose, I will in the natures of two sorts of grasse, the one fine, the other course, shew you the generall making of all sorts of Hay.

To make fine Hay.

First, then for the making of your fine rich grasse into Hay, if it grow in great abundance, thicke and close, and so lieth in the swathe, you shall haue one with a Pitchforke to follow the Mowers, and to spread and throw the grasse thinne abroad, that the ayre and sunne-beames may passe through it: and this is called in most Countries tedding of Hay. The next day, after the Sunne hath taken the dewe from the ground, you shall turne that which the day before you tedded, and then if you haue any more new mowen, you shall ted it also. The next day following, as before, when the dewe is from the earth, you shall turne your Hay againe, and so letting it lye till the Sunne be at his height, begin to stir it againe, at which time if you finde it is reasonably well withered, you shal then draw it into windrowes, that is, you shall marke which way the

winde

winde ſtandeth, and the ſame way that it bloweth, the ſame way with Forks & Rakes one after another, gather in the Hay into long, great, thicke rowes: then you ſhall make thoſe windrowes into large Cockes, of which the biggeſt is euer the beſt, for they will defend themſelues from raine, if happily any ſhall fall, whereas the little ſmall Cocke lying light together, taketh in the raine like a ſponge, and ſo makes the Hay a great deale much worſe then otherwiſe it would be; when your Hay is thus ſet in faſe Cocke, you ſhall let it reſt a day or two, that it may take a little ſweat therein, which will make the Hay wondrous pleaſant and ſweet, then when the Sunne is got vp to a prætie height, you ſhall open thoſe Cockes, and after the ſunne and winde hath paſſed through them, you may if the graſſe be cleane & fine of it ſelfe, without ranke graſſe, load it, and carrie it either into the Barne, or ſuch other place, as you haue appointed for the receit thereof: but if it haue any ranke graſſe, which you ſee vnwithered amongſt it, then you ſhall make it vp againe into faſe cockes, and ſo let it reſt a day or two more before you leade it away. And thus much for the making vp of fine Hay.

To make courſe Hay.

Now for the making of courſe graſſe into Hay, which you muſt ſuppoſe to be graſſe growing, in colde, moyſt, woodie, and barraine grounds, full of weedie, rough, and ſtumpie hearbage, long in growing, late ere it can be gathered, and therefore depriued of much of the Sunnes ſtrength, to ſweeten and wither it. This graſſe as ſoone as it hath beene mowne and tedded, as is before ſaid: the nert day you ſhall make it into little graſſe Cockes, as bigge as little Moale-hilles, and ſo hauing layne a day or better, then breake them open, and let them receiue the ſunne and winde, for they will heat and ſweat a little in the graſſe, which makes it Hay the ſoner & better: then after the Sunne hath ſpent all his power vpon it, you ſhall make it vp into little Cockes againe, putting two of the firſt Cockes into one, then hauing ſo layne another day, breake them open againe, and giue them the Sunne:

then

then make them vp againe, and put three or foure of those Cockes into one, and so let them lye another day, then breake them open as before, if the Sunne shine faire, and at euening make them vp againe, putting three or foure of those Cockes into one, and so euery morning after the Sunne is vp breake them open, and at euening make them vp againe, till you finde that the Hay is sufficiently well dried, and sweateth no more in the Cocke: but in the morning when you breake it open it is dry, without steemme, smoake, or vapour arising from it, which both your hand and eye may perceiue in the first stirring or mouing, and then you may at your pleasure leade it home, and house or stacke it as you shall haue occasion.

Vse of Hay for cattell to breed or labour with.

Now for the vse of Hay, it is two-folde, that is, either for the maintainance of breeding Cattell, or Cattell for labour, or else for the feeding of Cattell for the Market, or for slaughter: for the maintainance of breeding Cattell, or the Cattell which are imployed in your Plough or other labours, whether it be draught or trauell, you shall make choise of the sweet, and well-dried Hay, which is of fresh and greene colour, well withered, sound, and perfect Hay, though it be long, loggie, and not exceeding much sweet, it matters not; for being well Inned and dried, it will serue sufficiently for those purposes: and with this Hay to mingle sometimes Wheat-straw, Rye-straw, Barly, or Date-straw will not be amisse for heilding, or breede Cattell: but for worke-beasts, except necessitie constraine, let them haue Hay simple of it selfe, during the busie time of their worke, but when they rest, you may vse your discretion. For the times of giuing Hay or foddering to such Cattell as are in the house, the best is in the morning before they goe to labour, in the euening when they come from labour, presently after their drinke, and at night when you goe to bed. But for those Cattell which goe abroad, as Sheepe, heilding Beasts, and such like, to fodder them morning and euening, is out and out fully sufficient.

Now

Now for the vse of Hay for fat cattell, you shall make choyse of the fruitfullest, sweetest, finest, and shortest Hay you haue being full of flowers, pleasant and odoriferous to smell on: and although this Hay be mixt with some roughnesse, yet it is not the worse, for though your fat beast make thereof great oats, yet is the losse not great, for those oats may be giuen to other yelding and hungrie cattell, which will eate them with great eagernesse. This Hay would in the first gathering not be withered too sore but so stackt-vp with a little hastie greennesse that it may a little mow-burne, and alter the colour to a Reddish brownenesse, but by no meanes so moyst that it may mould, rot, or putrifie, for that is fulsome and vilde, but onely alter the colour, and thereby make the smell sweeter and stronger. This Hay will entice a beast to eate, and will strengthen and inable his stomacke, and withall will breed in him such a drought or thirst, that hardly any water will quench him, and the Grazier takes it fast euer for an infallible signe, that when his beast drinkes much he feeds and his tallow wonderfully increaseth. For the ordinarie times of fodring your fat cattell, if they be in the stall, and as we say, tyed vp by the head, the best is in the morning before and after water, at noone; in the euening before & after water, and late in the night, when you goe to bed, but if they feede abroad, and take the benefit of Fogge and: after-grasse, then to fodder them Morning Euening, and high-noone is fully sufficient.

Here I could speake of Peale-feeding Sheep, of Swine, and other cattel, either at the Trough, Mixe, Stacke, or such like, the seuerall manner of crutches, fashions of stals, and many other needfull rules appertaining to this mystery; but I am against my will confined, and therefore must referre it to some other occasion, being loath to spoyle an excellent discourse, with a tale halfe told, and imperfectly spoken: And thus much therefore of Peedowes, and their seuerall vses.

Chap. VIII.

A new method for the husbandly curing of all manner of Cattels diseases.

The reason for this Chaprer.

OF this Theame I haue written a whole (or as some will suppose many) Histories, yet doubtlesse nothing too much, the cause is so necessary and commodious: yet this I must let euery Reader vnderstand, that what I haue herein formerly done, I did for a general and vncontroulable satisfaction to the whole Kingdome, both the learned and vnlearned, and as well to satisfie the nicest and most curious opinion, as the simple and playne dealing creature: whence it came that I waded Artfully and profoundly into the vttermost secrets of this knowledge, leauing nothing vnsearcht, or vnset downe, that might any way tend to the satisfaction of any iudiciall Reader, and therefore toke liberty to make a large progresse, without sparing any paynes, to make my worke absolutely most perfect. But now, hauing onely to doe with our honest playne English Husbandman, who eyther cannot much read, or else hath little leasure to read, at most but a little memorie to bestow vpon his readings; I haue here for his ease both of memory, readings, and other veratyons, drawne him such a method for the curing of all the diseases in cattell, as was neuer yet found out by any man or Authour whatsoeuer: and is worthy to be preserued to all posterities for euer and euer.

Horses diseases to be cured with twelue Medicines.

To beginne then first with the Horse, which is the Husbandmans principallest creature, you shal vnderstand that he hath, of my knowledge, one hundred and odde diseases, or infirmities, besides other hurts and blemishes, for all which, I haue seuerally shewed seuerall cures, as may appeare by the volumes which are much too great for any

Husband-

Husbandman to carry in his braynes, and therefore for his ease I haue drawne all those hundred and odde sicknesses or sorrances, into twelue, and will assure euery Husbandman that with these twelue medicines following, hee shall perfectly cure all the diseases in a Horse, whatsoeuer.

To proceede then in an orderly manner to the cures: Euery husbandman must know that all diseases in a horse are inward or outward: inward as offending the vitall parts, or outward as troubling the members: to speake then first of inward sickneſſe, I will diuide it into two branches, that is, eyther it offends the heart, or the brayne: If it offend the heart, we call them, Feauers, Yellowes, Anticor, consumption of lungs, Liuer, Splene, Gall or other intrals, Wormes, Fluxes, Belly-bound, and diuers other of like nature: For any or all which, you shall first let your Horse bloud in the neck-veine, and then giue him, during his sickneſſe, to drinke, eyther in sweete Wine or strong Ale or Beere, if Wine a pinte, if Ale or Beere a quart, two spoonefull of the powder called Diapente, made of Aristolochia rot, Gentiana, Myrrhe, Eboni and Bachi lauri, of each equall quantitie, and let it be well breiued together, and doe thus euery Morning fasting, and let the Horse fast two houres after it.

Of inward sickneſſe.

The first Medicine.

If it offend the brayne we call them Appoplexies Palsies, Staggers, Colds, Glaunder, Coughes, mourning of the chyne, Pigrims, dizzineſſe, and a world of such like: and the cure is to take Assafeteda, and dissoluing it in Vinegar dip hurds therein, and stop it hard into his eares for two Mornings together after you haue taken from him great store of bloud at his necke-veine, and then giue him to drinke, during his sickneſſe, euery Morning a quart of Milke, wherein the white and rough cankerous Mosse of an old Oake pale hath beene sodden till the Milke grow thicke, then strayned & so giuen luke warme, and if you finde that no heauineſſe or dizzineſſe appeare in his head, then you may forbeare the bloud-letting, and the

The second Medicine.

Assafœtida, but not otherwise, in any case; and thus assured, these two medicines already declared will cure all the inly ward diseases in a Horse, whatsoeuer.

Of outward diseases.

Now for outward diseases, they are either naturall or accidentall: If they be naturall, they either grow from the generation, or bréede from whence a Horse is descended, or else from corruption of foode, or other vnwholesome kéeping; If they grow from the bréede and generation of the Horse, we call them the Wines, Wens, Knots, or swellings about the throat: and for the cure thereof, take a peny-worth of Pepper, beaten into powder; a

The third medicine.

spoonefull of swines-grease, the iuyce of one handfull of Rew, two spoonefuls of Wineger, and mixe them together, and put this equally into both the Horses eares, and so tye them vp and shake the eares, that the medicine may sinke downe, and take good store of blood from the Horses necke veine, and temple veines, and vse this medicine two or three mornings together.

If they proéede from corruption of foode, or any other vnwholsome keeping which corrupteth the blood, then we call them Impostumaetons, Byles, Botches, Fistulaes, Polemill, and such like: and the cure is, to take the loame

The fourth Medicine.

of an old mudde wall, strawes and all, but let there be no Lime amongst it, and boyle this loame with strong Wineger, till it be like a Pultus. and as hot as the Horse can abide it, apply it to the sore place, and it will not onely draw it to a head, and breake it, but also draw it, search it, and heale it.

There be also other diseases which proceed from naughtie foode, and the corruption of blood, and we call them Farcies, Scabs, Mangie, Scracthes, Paynes, Mallanders, Sellanders, and all of such like nature; and the cure

The fift Medicine.

is first to slit the hard knots, or rubbe off the scurfe, and make the sore places raw: then take yellow Arsnicke beaten to powder, and mixe it well with fresh grease, and then therewith annoynt the sore places all ouer, which done, tye vp the Horses head, so as he may not knappe or

bite

bite himselfe, and so let him stand an houre or five: then take strong old Wille warmde, and therewith bathe and wash the Horse all ouer, and so put him to his meat: and in this manner dresse the Horse or beast three or foure mornings, and it will be sufficient; onely you must not fayle to take from him good store of bloud at his necke vaine.

Now if his diseases proceed from accidentall causes, as from wounds, Bruises, Straynes, Galles, hurts in the Eyes, excretions, or broken bones, then you shall to euery one of these take these seuerall medicines which follow: as first, if they be wounds, in what sort soeuer taken or received, you shall take Turpentine, Ware, and hogs-grease, of each a like quantity, and melting them together into a saine, dresse the wound therewith, and it will heale it, how great or little soeuer. The sixt Medicine.

If they be bruises, whether gotten by stroake, naughtie Saddles, or other rubbes, from whence proceedeth many times old, putrefied & most ranckorous vlcers, you shall first if the tumor be onely swelled and not broken, apply vnto it the fourth medicine of Loame and Vinegar, but if it be an open old rancorous vlcer, you shall take Hogs-grease, Turpentine, Ware, and Verdigrease, of each a like quantitie, and being well mixt, and incorporated together dresse the sore therewith till it be whole, for this medicine will abate and keepe downe any spungie or naughtie dead flesh which arises and keepes the sore from healing, and may therefore alwayes be vsed in such like cases, whether the sore be new or old. The seuenth Medicine.

If they be straynes eyther of ioynts or sinewes, in what part or member soeuer it be, old or new, take strong Vinegar, Patch-grease, and Wheat-branne, and boyle them together till they be thick like a Pultus, and then apply it very hot to the strayne, Morning and Euening, and it is a most certayne cure, and will keepe the member from growing foule, knotted, or gourded, and will also take away all swellings or paynes of the limbes whatsoeuer. The eight Medicines.

The ninth Medicine.

If they be Galles, of what kinde or nature soeuer, whether on the backe, limbes, or any other outward part of the bodie, you shal take first fresh Butter scalding hot, and with it first bathe and wash the sore, then take thicke Creame, & miring it with the Swte of a Chimney till it be thicke, like a salue, with the same annoynt the sore place Morning and Euening, and it will cure it without any feare of dead flesh: if you doe strow vpon the sore the powder of Rossen it will be good also.

The tenth Medicine.

If they be any hurts in the eyes, as strokes, inflamations, Pinne-webbe, Canker, or any other mischiefe whatsoeuer, you shall then take true ground-Iuie, which otherwise is called of some Ale-hoofe, and beating a good handfull thereof in a morter, with a spoonefull or two of white Rosewater, or the water of Eye-bright, then strain it through a cleane wet cloath, and with that water dresse the sore eye Morning and Euening: or if you can conueniently three or foure times a day, for the oftner is the better, and it will without all fayle cure any sore eye in the world whatsoeuer, eyther of man or beast, or any other creature.

The eleuenth Medicine.

If they be excretions of bones, as Splents, Spauens, Curbs, Ringbones, or such like, in what part or member soeuer they be, you shall then take white Arsnicke, beaten or ground to fine powder, and making a little slit vpon the head of the excretion, the length of a Barly corne, or very little more, yet in any wise downe deepe to the excretion, & then with the poynt of your knife put the Arsnicke vpon the excretion, and so let the Horse stand with his head tied vp for two houres at least, for in that time the greatest anguish will be gone, and then put him vnto his meate, and in three or foure dayes after the excretion will fall away of it selfe; and then with a little swet Butter you may cure the sore, which will not be great.

The twelfth Medicine.

If they be broken bones, or bones out of ioynt, you shall after you haue placed them in their due place, first annoynt them with the Dyle of Hallowes, or for want of it with warme

warme Patch-greaſe, and then clap about them a plaſter made of Pitch, Roſſen, and Maſticke, and ſo with ſoft and flat ſplents, ſo ſplent the member, as it may not moue, and ſo let it reſt nine dayes ere you dreſſe it againe, and in any caſe ſo ſling the Horſe or Beaſt that he may not during that time, put his member to the ground, which a little diligence and payne will eaſily doe.

If your Horſe haue any infirmitie in his houes as quitter-bone, ouer-reach, pricke, crowne ſcabbe, rotten frush, or any ſuch vicerous diſeaſe, you ſhall firſt lay it open, and then heale it with the ſeuenth Medicine. But if it be foundring, frettelhing, or ſuch like, then you ſhall firſt pare all his houes cleane ouer, ſo thinne that you may diſcerne the quicke all ouer, then let him bloud at the toes, and take great ſtore of bloud from him, but in any caſe cut not the veine in ſunder: then take the firſt medicine, and being boyling hot (after hollow ſhoes haue bene tackt on his feete) with Flare hurds dipt therein, ſtoppe all the ſoales of his feete vp hard, and thus doe twice in fiue dayes, and it will bring his feete to their full perfection againe, without any great loſſe or trouble. Diſeaſes in the feete.

As for the common infirmities in a Horſes priuy parts, which are ſwellings, inflammations, incording, & ſuch like, you ſhall but only ſwimme your horſe in cold water Morning and Euening, and it is a preſent helpe, both for them, or the ſtifling of a horſe in his hinder ioynt: Thus you ſee theſe twelue medicines will ſufficiently cure all the diſeaſes in Horſe or Beaſt whatſoeuer, which who ſo will not carry in his memory, he is worthy now and then to be puniſht for his ſloath, and ſometimes to ſuffer loſſe, which may make him more induſtrious to ſtudie for his owne good and profit. And thus much for the cure of diſeaſes. Diſeaſes in the priuie parts, or for ſtifling.

FINIS.